

**WHITE STREET LANDFILL
PHASE II CORRECTIVE ACTION EVALUATION REPORT
GREENSBORO, NORTH CAROLINA
PERMIT # 41-03
S&ME Project No. 1584-98-081**

Prepared For:



The City of Greensboro

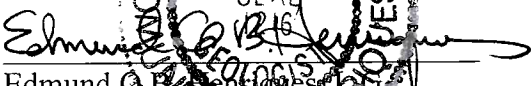
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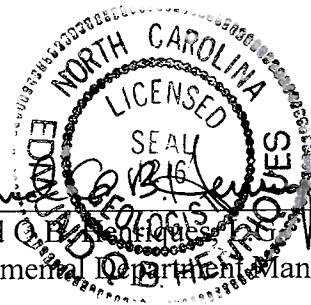


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EXECUTIVE SUMMARY

Pursuant to 15A NCAC 13B.1635 of the North Carolina Department of Environment and Natural Resources, Division of Waste Management (NCDENR) whenever it is demonstrated that one or more constituents listed in Appendix II has been detected at a statistically significant level exceeding the 15A NCAC 2L Groundwater Quality Standards (2L standards) and/or NCDENR Groundwater Protection Standards (GPS), the owner or operator shall initiate Assessment of Corrective Action Measures.

Several volatile organic compounds including benzene, trichloroethene, tetrachloroethene, vinyl chloride, and 1, 4-dichlorobenzene as well as the inorganic constituent thallium have exceeded the 2L standards and/or the GPS within the Phase II portion of the White Street Landfill compliance monitoring well network. These exceedances above the 2L Standard or GPS triggered the Assessment of Corrective Action Measures. This process requires Facilities to characterize the nature and extent of the plume as well as assess possible remedies to restore groundwater quality at the Facility to levels below the 2L standards, and prepare a Corrective Action Plan (CAP) to implement the appropriate remedy(s) to achieve compliance with the standards.

Based on the results of a Nature and Extent Study and Assessment of Corrective Measures Report completed by S&ME, Inc. on behalf of the City of Greensboro (City), the City selected Phytoremediation coupled with Monitored Natural Attenuation (MNA) to restore groundwater quality in the Phase II portion of the White Street Landfill.

In accordance with 15A NCAC 13B .1636 S&ME, Inc. prepared a Corrective Action Plan dated April 30th 2009 to implement the City's selected combined remedies of Monitored Natural Attenuation (MNA) coupled with Phytoremediation.

Pursuant to the NCDENR, Solid Waste Sections' guidance document MNA Excerpt from Examples of Approved Groundwater Corrective Measures For Solid Waste Management Facilities, June 2008, "The interpretation of the MNA performance parameter data and the technical evaluation of MNA as a remedy at the facility shall be presented in a comprehensive MNA Corrective Action Evaluation Report (CAER) at least once every five calendar years. The initial MNA Corrective Action Evaluation Report required for submission coincides with the minimum number of independent sampling data points required for most statistical or regression analyses." Accordingly, S&ME has prepared this initial CAER to evaluate the performance of MNA at the Facility since the minimum number of independent sampling data points for statistical and regression analyses has been completed at the Facility. Since MNA was coupled with Phytoremediation, this report was prepared subsequent to the 2011 installation of the Phytoremediation systems in select areas within Phase II.

This report has been prepared following the NCDENR Solid Waste Sections' Guidelines for Corrective Action Evaluation Reports. This CAER report finds that MNA is a viable corrective measure for the evaluated portions of Phase II of the White Street Landfill.

1.0 INTRODUCTION

1.1 Site Background

The White Street Landfill is located at the end of White Street in the City of Greensboro, North Carolina (reference **Figure 1**). The subject landfill contains three distinct phases, I, II, and III, which operated under Permit Nos. 41-03 (Phase I & II) and 41-12 (Phase III). Phase II of the landfill is an active construction, demolition, and debris landfill on top of a closed municipal solid waste (MSW) cell. The Phase II portion of the landfill was included under Permit No. 41-03. A detailed site map is included as **Figure 2**. The NCAC 2L Groundwater Quality Standards (2L standards) for several target constituents have been exceeded in Phase II of the facility at points along the north-northwestern property boundary. The nearest down-gradient receptor north-northwest of the facility is North Buffalo Creek.

A Nature and Extent Study Report has been completed by S&ME describing the nature of the primary constituents of concern within Phase II exceeding their respective 2L standards, where the exceedances occurred within the compliance network, and to what extent the 2L standards were exceeded. The results of the Nature and Extent Study indicated that organic constituents tetrachloroethene (PCE), trichloroethene, benzene, 1,4 dichlorobenzene, and vinyl chloride, as well as inorganic constituents thallium and vanadium, exceeded the 2L standards and/or NCDENR Groundwater Protection Standards (GPS) values within the Nature and Extent Study (NES) wells at the north-northwestern property boundary near North Buffalo Creek.

Subsequent to the completion of the Nature and Extent Study, S&ME completed an Assessment of Corrective Measures Report (ACM) which documented the potential corrective measure options and recommended, with public input, measures that are appropriate for the facility based on the magnitude of the constituents of concern. The ACM evaluated “The performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination; the time required to begin and complete the remedy; the costs of remedy implementation; and the institutional requirements such as State and Local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy(s),” as per 15A NCAC 13B.1635 of the NCDENR DWM.

In order to incorporate comments from the general public regarding the selection of the remedy for the Phase II portion of the White Street Landfill, the City of Greensboro held a public meeting on December 20, 2007 at 6:30PM at the Peeler Recreational Facility in Greensboro. An announcement of the public meeting was run in the local newspaper for two consecutive weeks prior to holding the public meeting. The above mentioned NES and ACM Reports were displayed for public review at two local libraries. Both of these Reports were approved by NCDENR.

Subsequent to the original submittal of the NES and ACM Reports, it was decided between S&ME and the City of Greensboro to include Phytoremediation as an integral part of the Facility’s selected remedies to restore groundwater quality and attain the

approved GPS. In order to recommend Phytoremediation as part of the selected remedy the Facility's ACM had to be amended to include Phytoremediation as a possible remedy. The ACM was amended to include Phytoremediation, and in order to satisfy the requirements of 15A NCAC 13B.1635 (d), the amended ACM was made available for public review at two public libraries for a 30-day public comment period followed by a subsequent public meeting with interested and affected parties. The second public meeting was held on June 19, 2008 at the Peeler Recreational Facility in Greensboro.

The final step in the Assessment of Corrective Measures process was to prepare a Corrective Action Plan to implement the selected remedy(s) outlined in the ACM Report. In accordance with the guidelines set forth in 15A NCAC 13B.1636, S&ME prepared a Corrective Action Plan (CAP) for the White Street Landfill Facility which was issued and dated April 30, 2009. The CAP outlined the necessary course of actions to implement the selected remedies of MNA and Phytoremediation at the Facility, described the required revisions to the Facility's Water Quality Monitoring Plan (WQMP), discussed the implementation schedule, and included an estimated projected schedule to meet the requirements of 15A NCAC 13B.1636 (b) (2) to "attain the approved Groundwater Protection Standards (GPS)" and provides for the protection of human health and the environment.

Subsequent to the completion and approval of the CAP additional groundwater quality data was obtained, which demonstrated a reduction in the CAP listed constituents of concern and projecting a potential for achieving groundwater quality compliance near term at select compliance points without implementation of additional corrective measures. On February 3, 2010 S&ME submitted a Request to Suspend Construction of Select Phytoremediation Beds (Amendment to Corrective Action Plan) to NCDENR. The request included:

1. Elimination of thallium as a current COCs requiring corrective measure, thereby, eliminating the need to construct phytoremediation beds at locations associated with wells II-6, II-11, and II-12.
2. Installing sentinel well SMW-4 and assessing groundwater quality prior to the installation of the phytoremediation bed associated with well II-6. Considering the close proximity of compliance well II-6 to the waste boundary, if groundwater quality at SMW-4 documented compliant conditions, installation of the phytoremediation bed associated with well II-6 would be postponed until required by regulation.
3. Suspending the installation of phytoremediation beds in the area of well II-7 based the concentrations of COCs at monitoring well II-7 and the minute degree of separation between the current COC concentrations and the corresponding 2L Standards. The CAP approved MNA program would be implemented at II-7.

On April 29, 2010, NCDENR approved the requested suspension of the installation of sentinel monitoring wells SMW-2 and SMW-5 and the certain Phytoremediation Beds. During 2010 additional investigations were completed in order to prepare a final design for the Phytoremediation system.

Between July 8 and 9, 2010, three new sentinel monitoring wells were installed down-gradient of each of the compliance and former NES monitoring well in which current COCs have been detected at concentrations exceeding the 2L Standard. Sentinel monitoring wells SMW-1, SMW-3, and SMW-4 were installed down-gradient of monitored unit Phase II, prior to North Buffalo Creek, and prior to the Compliance Boundary. Sentinel well SMW-1 was installed down-gradient of compliance well II-2, SMW-3 was installed down-gradient of NES well II-9, and SMW-4 was installed down-gradient of compliance well II-6. These wells will serve to monitor groundwater quality after interaction with the phytoremediation beds and/or prior to groundwater discharging to North Buffalo Creek. The wells monitor the same portion of the uppermost aquifer as the affected compliance or NES wells up-gradient of their location. The locations of the sentinel monitoring wells are illustrated on Figure 2.

S&ME teamed with Ecolotree® of North Liberty, Iowa to complete certain site specific pre-design inspections needed to complete the final design and confirm the planned use of a perimeter deep-rooted phytoremediation system, referred to by Ecolotree® as an EBuffer®. In concept, the EBuffer® uses poplar trees to remove certain groundwater pollutants as shallow groundwater passes through a dense root zone below the planted buffer. In essence, the EBuffer® is a narrow subsurface reactor that acts as a final filter around selected portions of a landfill, capable of reducing the concentrations of certain contaminants in the shallow groundwater, through biological reduction and absorption methods. The EBuffer® also provides beneficial use of groundwater and reduces plume migration using a “sponge and pump” process.

On April 3, 2011, S&ME and Ecolotree® commenced with the installation of two EBuffer® units along select portion of White Street Landfill, Phase II. One EBuffer® referred to as the North EBuffer® was installed between NES well II-9 and sentinel well SMW-3. The second EBuffer® referred to as the South EBuffer® was installed in the vicinity of compliance well II-1. Figure 2 depicts the EBuffer® locations and the locations of the associated groundwater monitoring wells. Following installation, S&ME has performed monthly inspection of the EBuffer® system to monitor tree growth, tree damage, tree mortality, and other factors. To date, the overall tree growth and survival rates have met expectations; with one exception. Based on the monthly inspection reports, an isolated segment of the Northern EBuffer® area exhibited evidence of some zonal tree death. After examining the available observation data, Ecolotree recommended a partial replanting of the hybrid poplar trees in the area of concern. On July 13, 2011, 50 hybrid poplar trees were planted to replace dead poplars in the Northern Ebuffer®. Subsequent monthly Ebuffer® inspections indicated survival of some of replanted trees. It is currently believed that minor modifications of the land surface are needed to improve drainage in the area of concern. A 2012 late winter/early spring replant will address these areas of concern and the future effectiveness of the Ebuffer®.

1.2 Aquifer Characteristics

The uppermost aquifer was characterized during a subsurface exploration program executed by BPA Environmental and Engineering Inc. (BPA). This program was initiated during installation of the initial groundwater monitoring network during February, 1996. In situ hydraulic conductivity tests were performed by BPA on wells I-5, II-1, II-2, II-3, II-4, II-5, and MW-13. The data from these tests yielded hydraulic

conductivity values ranging from 0.042 feet/day in II-5 to 0.380 feet/day in II-3. A complete discussion of the test methods and calculations is presented in BPA's February 1996 report "In-situ Hydraulic conductivity Testing, White Street Landfill, Greensboro, North Carolina". In-situ hydraulic conductivity tests were performed by HDR Engineering, Inc. on monitoring wells II-6, II-7, II-8, and MW-14 in the fall of 1995. The hydraulic conductivities determined by HDR ranged from 0.221 feet/day in II-6 to 2.353 feet/day in II-8. These data were used to calculate groundwater flow velocities across the site.

The static water levels in the Phase II monitoring wells were measured during October 2011. During the October 2011 sampling event, the static water depths ranged from 7.18 feet to 31.92 feet below the top of well casing on these dates. Groundwater and well casing elevation data are presented in **Table 1**. A groundwater contour map was constructed using the data collected during October 2011 is presented as **Figure 3**. The groundwater elevation data collected during this monitoring event indicates that the groundwater beneath Phase II generally flows toward the northwest, toward Buffalo Creek. This is, in general, consistent with the results from previous monitoring events.

The groundwater gradient at select well locations was calculated assuming a constant groundwater gradient along the flow line between groundwater elevation contours adjacent to each well. Groundwater flow lines were drawn through each well based upon the groundwater elevation data collected during this monitoring event.

Based on a variation of Darcy's Law, the rate of groundwater movement within the regolith aquifer was calculated at each monitoring well using the following equation:

$$V = \frac{K i}{N}$$

Where V = velocity (ft/day)
 K = hydraulic conductivity (ft/ft)
 i = groundwater gradient (ft/ft)
 N = effective porosity (dimensionless)

Calculated hydraulic conductivity and gradient values and estimated effective porosity values for each well were used in the velocity calculations. The 20 percent effective porosity value is based on porosity and specific yield versus grain size distribution relationships presented in Fetter (1988), and is typical of the types of soils (predominantly silts and sandy silts with some clays) comprising the regolith at the landfill. The calculated groundwater seepage velocities ranged from 0.008 feet/day to 0.192 feet/day and are summarized in **Table 2**.

Calculation methodology is described in the following sections.

1.5.1 Darcy's Velocity

In 1856, Darcy first characterized flow through a porous media. Darcy's Law states that;
 $Q = k i A$ where;

Q = Rate of flow, [cm³/sec]

k = Hydraulic Conductivity, [cm/sec]

i = Hydraulic gradient = dh/dl

A = Cross sectional area, perpendicular to direction of flow [cm²]

Therefore, flow is equal to the velocity of the fluid multiplied by the cross-sectional area where flow is occurring. This yields Darcy's velocity.

1.5.2 Seepage Velocity

The seepage velocity (v_s) of a fluid flowing through a porous media is derived from Darcy's velocity. Darcy's velocity does not, however, literally describe the movement of fluid through the porous media. It is simply a statistically convenient product. This is due to one of Darcy's original assumptions that flow occurs over the entire cross-sectional area, thus ignoring the soil particles themselves. To determine the actual speed a fluid flows through a porous media, such as soil, a more accurate representation of the area of flow must be realized. Soil mechanics commonly makes use of a void space to soil solids space ratio. Porosity is defined as the volume of voids per volume of total space;

$$n = V_v / V_t$$

Therefore, the seepage velocity of a fluid moving through soil may be expressed as;
 $v_s = v_d / n$

As discussed in the CAP, phytoremediation beds acts as a bioreactor. Based on research and field trials completed by Ecolotree®, 8 days is the target storage/interaction time in the root system "bioreactor" to successfully remediate the COCs. The average groundwater seepage velocity in the down-gradient region of the Phase II portion of the White Street Landfill ranged from 0.008 feet/day to 0.192 feet/day based on the October 2011 gradient calculations (reference Table2). Based on this average groundwater seepage velocity, the 33 foot wide EBuffers installed in Phase II provide approximately 330 days storage/interaction time in the root system "bioreactor" which easily surpassing the 8 day target.

1.3 Contaminant Distribution

The Nature and Extent Report submitted to the NCDENR in August of 2007 documented the exceedance of the 2L standards and/or GPS at Phase II of the White Street Landfill.

As a result of several network compliance monitoring wells containing target constituent concentrations exceeding the established NCAC 2L groundwater standard and/or GPS, Phase II of the White Street Landfill as defined under NCDENR Permit #41-03 installed seven non-network shallow monitoring wells, with one deep monitor well. The wells are designated II-2B, II-7B (deep monitor well), II-9, II-10, II-11, II-12, and II-13.

The nature of impacts to the hydrogeologic regime at the White Street Landfill Facility is primarily from low level volatile organic constituents. However, the metal thallium also exceeded the GPS of 0.28 µg/L set by NCDENR for thallium at the time the April 2009 Corrective Action Plan was written. However thallium has been removed as a constituent of concern with the approval of NCDENR since thallium has not been detected above the GPS during subsequent groundwater monitoring events.

The lateral extent of contaminant migration away from the landfill is limited by North Buffalo Creek, which truncates the primary component of groundwater flow in the uppermost prevalent aquifer along the northern Facility boundary. This creek is a local

surface water hydraulic boundary and it is expected to be the local discharge point for the uppermost prevalent aquifer; therefore, it represents the primary receptor of impact from constituents migrating away from the landfill. The vertical extent of contaminant migration has been observed to be limited to periodic low level impacts from tetrachloroethene at a concentration close to the NCAC 2L standard in NES well II-7B. Groundwater analytical results for this bedrock aquifer monitoring well report no 2L standard violations during both 2011 semi-annual monitoring events.

For the last two years the occurrences of the organic constituents of concern are limited to monitoring wells II-1, II-2, II-2B, II-6, II-7, and II-9. The organic constituents of concern detected in monitoring well II-1 include vinyl chloride, benzene, and 1,4 dichlorobenzene. The organic constituents benzene, 1,1-dichloroethane, trichloroethene, tetrachloroethene, and vinyl chloride have all been detected at monitoring well II-2 with benzene, tetrachloroethene, and vinyl chloride also being detected at monitoring well II-2B. Monitoring well II-7 has shown recent detections of vinyl chloride above its 2L standard. Finally, vinyl chloride has been detected in monitoring well II-9 at reported concentrations above its respective 2L standard.

The occurrences of these volatile organic constituents of concern are defined by the location and vicinity of the above listed monitoring wells as illustrated on Figure 2. For illustrative purposes the lateral extent of these organic constituents of concern are shown on **Figures 4 through 7** which are Contaminant Distribution Maps of each constituent of concern identified and presented in the NCDENR approved Corrective Action Plan. Isoconcentration maps were not prepared due to the absence of groundwater quality data within the source area of the groundwater contamination plume. The monitoring well network is on the periphery of the overall groundwater contaminant plume. Therefore, preparing isoconcentration contours using this data would not accurately represent the entire contaminant plume and would appear to indicate that the source of groundwater contamination was on the distal edge of the plume rather than beneath the waste management units. The down-gradient extent of the organic constituents of concern is limited by North Buffalo Creek, which is the primary receptor of groundwater influenced by the landfill.

It is S&ME's opinion that the presences and distribution of trichloroethene (TCE) and vinyl chloride (VC) are likely related to anaerobic degradation of tetrachloroethene in the decomposing waste. As such, TCE and VC in certain down-gradient compliance wells, likely represent the leading edge of the chlorinated solvent plume within this hydrogeologic regime.

The occurrences of the metal thallium were previously limited to monitoring wells II-1, II-2, II-6, NES Well II-11, and II-12 and is also defined by the location and vicinity of these wells. The down-gradient extent of thallium was defined by North Buffalo Creek which is the primary receptor of groundwater influenced by the landfill. It is important to note that thallium has not been detected above its respective GPS of 0.28µg/L in any compliance monitoring well for at least four consecutive groundwater monitoring events. Since thallium has not been detected above its GPS in the compliance monitoring wells during subsequent groundwater monitoring events, the need to address thallium through the corrective measures has been nullified as approved by NCDENR.

1.4 Description of Site Conceptual Model

1.4.1 Surface Water Model

When precipitation exceeds infiltration and evaporation, this water begins to collect on the land surface and move by gravity from areas of high topography to areas of lower topography. The natural topography surrounding the waste management units at the Facility is best characterized as gradual to moderately sloping with small drains and small hollows truncating the slopes and feeding the unnamed tributaries of North Buffalo Creek. Surface runoff pathways in the undisturbed areas of the landfill will generally mimic the slope gradients and follow the drains and small hollows to the creek. Overland conveyance methods are expected to include both sheet flow and stream flow.

The nearest surface water body to the waste management units is North Buffalo Creek. The shortest distance between any of the waste management units and North Buffalo Creek is between the stream and the northeast corner of the Phase II disposal area near the northeast property boundary. The distance from the stream to the northeast edge of the waste management units of the landfill varies along the waste boundary. This stream will be the primary receptor of surface water runoff from the landfill

Infiltration and percolation into the upper soil horizon is expected to be moderate due to the sandy loam content within this stratum. Percolation within the waste management units is expected to be minimal since the closed municipal solid waste landfill has been capped with a compacted low permeability clay layer. However, in areas where weathering and erosion may have thinned or removed some of the upper soil horizon, vertical percolation rates may be higher as this soil horizon generally has a greater sand and gravel content. Water that infiltrates the land surface, and which is not lost to evaporation and transpiration ultimately becomes part of the underlying local groundwater aquifer system.

1.4.2 Groundwater Model

The conceptual model for the site hydrogeology is based on models presented by Heath (1982), Heath (1989) and LeGrand (2004). Heath (1989) describes the occurrence of groundwater in the North Carolina Piedmont as a two-part system consisting of regolith overlying fractured, crystalline bedrock. The upper zone, or regolith, consists of an unconsolidated or semi-consolidated mixture of clay fragmental material ranging in size from silt to sand boulders. Water is introduced to the regolith by precipitation and stream flow. Heath describes the regolith as a storage reservoir for the groundwater system and the fractures in bedrock as the conduit. The porosity of the regolith is generally on the order of 20 to 30 percent. Because of its high porosity, the regolith functions as a reservoir which slowly feeds water downward into the bedrock.

The site geology consists of fractured crystalline bedrock overlain by saprolite. The saprolite observed at the Facility has a transitional “regolith” zone that consists of rubbly weathered primary rock with little saprolite. The thickness of this transitional zone is expected to vary across the site.

The uppermost pervasive aquifer at the site is generally within the weathered and metamorphosed granitic gneiss. This “water table” zone is controlled by climactic

factors. Groundwater levels vary seasonally, declining during the summer when atmospheric conditions favor evaporation and plants transpire large amounts of water, and rising during the winter when plants are dormant. Annual groundwater storage in the vicinity of the Landfill Facility is thought to be relatively stable.

As described by LeGrand (2004), the groundwater is expected to move through the regolith into interconnected fractures in bedrock while another component flows through the regolith parallel to the bedrock surface. The transition zone from saprolite to fractured bedrock and the groundwater flow directions are generally expected to mimic topography, but can be influenced by relict structure. The compliance monitoring wells installed in Phase II generally intersect and monitor the saprolite regolith zone directly above bedrock.

The Phase II portion of the White Street Landfill represents an upland area that generally slopes downward to the north toward North Buffalo Creek. The waste management unit is generally located in a recharge area, with recharge limited by the compacted low permeability clay layer landfill cover system. Water percolating through the cover system interacts with waste and generates leachate. Leachate from the waste management unit will percolate at a steep to near vertical angle until it reaches the uppermost prevalent aquifer. Once the leachate containing contaminants of concern (COC) enter the uppermost aquifer, the characteristics of their further migration toward North Buffalo Creek will be governed by the flow paths of groundwater within the aquifer. With North Buffalo Creek a significant local surface water hydraulic boundary, the monitored regolith and bedrock aquifers north of Phase II, are expected to discharge into North Buffalo Creek.

Groundwater quality in the down-gradient region of the landfill is monitored by the existing compliance and NES monitoring well network, placed between the waste management unit and North Buffalo Creek. The closed MSW landfill is believed to be the source of the COCs detected in groundwater. The COC source area(s) beneath the waste are not specifically defined, but they exist further up-gradient along the groundwater flow paths intercepted by the groundwater monitoring wells documented to contain the COCs. It is on this basis that areas of highest COC groundwater concentrations (source areas) are up-gradient of and outside of the monitoring well network; therefore, the dissolved phase groundwater plumes observed represent the outer most or most distal portions of the plume. Furthermore, based on the groundwater geochemistry that can be observed with the existing monitoring well network, non-aqueous phase liquid (NAPL) chlorinated hydrocarbons are not known to exist at the Facility.

1.4.3 Remediation Model

The City of Greensboro has selected phytoremediation coupled with monitored natural attenuation (MNA) to remediate the COCs previously discussed and restore groundwater quality in the Phase II portion of the landfill. NCDENR-DWM permitted the City of Greensboro to move the compliance boundary from its former location within 250 feet of the Phase II waste management unit to the edge of North Buffalo Creek. This shift in

the official compliance boundary was included in the permit amendment to implement this Corrective Action Plan as well as the revise the Water Quality Monitoring Plan for the Facility. Additionally, according to NCDENR DWM, the phytoremediation beds could be planted within the 50 foot buffer offset from the Facility property boundary which is the center line of North Buffalo Creek.

Phytoremediation

S&ME teamed with Ecolotree® and Dr. Lou Licht to design and implement the phytoremediation system in the Phase II portion of the landfill. The phytoremediation beds areas were chosen based on the distribution of the COCs which are illustrated on Figures 4 through 7 of this Report. Originally, the CAP proposed to install a continuous phytoremediation bed beginning at the mid-point between monitoring wells II-2B and II-13 and continuing west and south to the midpoint between compliance wells II-7B and II-10 as illustrated in S&ME's Phase II Corrective Action Plan dated April 20th, 2009. Additionally, the CAP proposed to install a second continuous phytoremediation bed beginning just northeast of compliance well II-1 and continuing to a point southwest of compliance well II-12. However; as approved by NCDENR, the actual installations of in-situ phytoremediation beds were reduced to the locations illustrated on Figures 4 through 7. These changes will be discussed in Section 2.5 of this report.

Hybrid poplar trees and willows are the desired species for phytoremediation systems targeting chlorinated solvents and metals which make up the COCs at the White Street Landfill. In concept, the poplar trees are used to remove certain groundwater pollutants as shallow groundwater pass through a dense root zone below the planted buffer. In essence, the system is a narrow subsurface reactor that acts as a final filter around selected portions of a landfill, capable of reducing the concentrations of certain contaminants in the shallow groundwater, through biological reduction and absorption methods. The trees are planted in beds either directly above the impacted groundwater plume or down-gradient of the source area. The beds are planted perpendicular to the primary direction of groundwater flow. The depth to groundwater in the Phase II portion of the landfill is shallow enough for hybrid poplar trees to effectively uptake the COCs through rhizofiltration. According to Dr. Licht, we should assume an average of 12 gallons of uptake per 7 to 8 linear feet of row, or 12 gallons/day per tree. However, mature hybrid poplar trees that have reached canopy height (40 feet and up) can uptake 30 to 40 gallons per day.

According to Dr. Licht, the phytoremediation bed acts as a bioreactor. The target is 8 days storage/interaction time in the root system "bioreactor" to successfully remediate the COCs. Based on research and field trials completed by Ecolotree®, trees planted in 4 rows with 11 feet of spacing between each row such that the minimum span of the phytoremediation bed is 33 feet wide typically achieves this targeted 8 day storage/interaction time within the root system.

The volatile organic plume in the down-gradient region of Phase II can be divided into 5 distinct zones or Areas of Concern (AOC). These AOCs are based on prior points of non-compliance relative to groundwater quality standards and/or with respect to monitoring wells associated with the phytoremediation beds. The first AOC includes

NES well II-9 and the associated in-situ phytoremediation beds which have collectively been labeled the Northern EBuffer Area. The second AOC includes compliance monitoring well II-1 and the associated in-situ phytoremediation beds which have collectively been labeled the Southern EBuffer Area. The third AOC contains compliance well II-6 and associated Sentinel Monitoring Well SMW-4, the fourth contains compliance wells II-7 and II-7B, and the fifth AOC includes compliance wells II-2 and NES well II-2B and associated Sentinel Monitoring Well SMW-1.

As discussed previously in Section 1.2, the phytoremediation beds target an 8 day storage/interaction time in the root system “bioreactor” to remediate the COCs. The average groundwater seepage velocity in the down-gradient region of the Phase II portion of the White Street Landfill ranged from 0.008 feet/day to 0.192 feet/day based on the October 2011 gradient calculations (reference Table 2). Based on this average groundwater seepage velocity, the 33 foot wide EBuffers installed in Phase II provide approximately 330 days storage/interaction time in the root system “bioreactor” which easily surpasses the 8 day target.

During March 2010 and again in November 2010, S&ME and Ecolotree completed additional site characterization data gathering needed to complete the final design and confirm the planned use of a perimeter deep-rooted phytoremediation system, referred to by Ecolotree as an EBuffer®. On April 3, 2011, S&ME and Ecolotree commenced with the installation of two EBuffer® units along select portion of White Street Landfill, Phase II. One EBuffer® referred to as the North EBuffer® was installed between NES well II-9 and sentinel well SMW-3. The second EBuffer® referred to as the South EBuffer® was installed in the vicinity of compliance well II-1. For complete details of the phytoremediation system reference S&ME’s White Street Landfill Installation Report of EBuffer & Sentinel Wells dated September 29, 2011.

The fatal flaw characteristics for a site to impede the success of a phytoremediation system include; wildlife, salinity, over hydration, lack of management, and agronomy (weed control). Phytoremediation beds, particularly in the seedling stage, must be protected from beavers and deer which cut or browse on these plants. If onsite soils are too saline or overly hydrated, hybrid poplars will not survive. It is critical to maintain proper moisture while avoiding over hydration of the tree beds. Since the planting area for the phytoremediation beds at the Facility is an alluvial deposit S&ME considered the potential impacts of clay layers between the sand layers of the alluvium. According to Dr. Licht, clay layers can actually enhance the performance of an in-situ phytoremediation bed by keeping vertical percolation rates from being too rapid. The phytoremediation beds are maintained and the weeds have been kept mowed to prevent weeds and other vegetation from overtaking and choking out the hybrid poplars.

Monitored Natural Attenuation

Natural attenuation processes include biodegradation, dispersion, sorption, and volatilization which influence the fate and transport of chlorinated hydrocarbons in an aquifer system. Monitored Natural Attenuation (MNA) relies on these natural physical, chemical, and biological processes to achieve site-specific cleanup goals within a reasonable period of time. While there is no design involved with MNA, a detailed site

characterization coupled with the collection of evidence that MNA processes are occurring at the Facility, are required to support the remedy. Historic water quality data has generally provided evidence for MNA occurring at the Facility. A more detailed screening process for monitoring the progress of MNA is described in Section 2.2 of this report.

1.5 Regulatory Status

Groundwater exceedances above the 2L Standard in Phase II of the White Street Landfill triggered the Assessment of Corrective Measures process. This process requires Facilities to characterize the nature and extent of the release as well as assess possible remedies to restore groundwater quality at the Facility to levels below the 2L standards, and prepare a Corrective Action Plan (CAP) to implement the appropriate remedy(s) to achieve compliance with the standards.

A Nature and Extent Study, Assessment of Corrective Measures Report, and Corrective Action Plan were completed by S&ME, Inc. on behalf of the City of Greensboro (City) for the White Street Landfill. The CAP was prepared in accordance with 15A NCAC 13B .1636 to implement the City's selected combined remedies of Monitored Natural Attenuation (MNA) coupled with Phytoremediation to restore groundwater quality at Phase II of the White Street Landfill (Facility). The Facility is currently implementing the Corrective Measures process and has installed selected in-situ phytoremediation beds as illustrated on Figures 4 through 7.

2.0 CORRECTIVE ACTION SUMMARY

2.1 Physical Changes in Aquifer Conditions

The physical aquifer conditions have not changed since the CAP was completed and approved by NCDENR.

2.2 Chemical Changes in Aquifer Conditions

In order to assess chemical changes in aquifer conditions, monitor the effectiveness of MNA, and to determine if a reducing environment is present within the hydrogeologic regime within the Phase II portion of the landfill, S&ME has completed four baseline groundwater monitoring events in which MNA indicator parameters were collected from selected groundwater monitoring wells within the plume zone and assessed the collected samples for the following MNA indicator parameters:

- Temperature
- pH
- Oxygen
- Oxidation Reduction Potential (ORP)
- Ferrous Iron
- Dissolved Hydrogen
- Chloride
- Nitrate
- Sulfate

- Sulfide
- Alkalinity
- Total Organic Carbon
- Carbon Dioxide
- Ethane/Ethene
- Methane
- Volatile Fatty Acids
- BTEX
- Trichloroethene
- Dichloroethene
- Vinyl Chloride
- 1,1,1 Trichloroethane
- Chloroethane

As a remedial strategy for chlorinated solvent-contaminated groundwater, natural attenuation with an emphasis on biodegradation requires that favorable microbiological and environmental conditions exist at a site; these generally include the presence of dehalorespirators capable of biodegrading the target compounds, suitable concentrations of electron donor (dissolved hydrogen or organic compounds which via fermentation generate dissolved hydrogen), a favorable oxidation-reduction potential, an organic carbon source, vitamins and nutrients, and an appropriate pH, and temperature. Deficiencies in any of these conditions may result in either no dechlorination activity or partial dechlorination at a site thereby limiting the implementation of natural attenuation as a feasible remedial option. In order to evaluate if natural attenuation processes are occurring at a site, detailed groundwater characterization is required in support of MNA approval. Some positive indicators for reductive dechlorination are:

- The presence of PCE daughter compounds.
- Elevated chloride concentration (>2 times background).
- Methane, ferrous iron (> 1 mg/L), and sulfide (> 1 mg/L) production.
- Dissolved hydrogen concentration greater than 1 nM.
- Low dissolved oxygen concentration (< 0.5 mg/L).
- Low oxidation-reduction potential (< 50 mV).

The primary objective of the natural attenuation investigation is to determine whether natural processes will be capable of attaining site-specific remediation objectives in a time period that is reasonable compared to other alternatives. Further, natural attenuation should be evaluated to determine if it can meet all appropriate Federal and State remediation objectives for a given site. This requires that projections of the potential extent of the contaminant plume in time and space be made. These projections should be based on historic variations in contaminant concentration, and the current extent and concentrations of contaminants in the plume in conjunction with measured rates of contaminant attenuation.

According to U.S. Environmental Protection Agency (EPA), Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater (1998) chlorinated solvent plumes can exhibit three types of behavior depending on the amount

of solvent, the amount of biologically available organic carbon in the aquifer, the distribution and concentration of natural electron acceptors, and the types of electron acceptors being used. Individual plumes may exhibit all three types of behavior in different portions of the plume. The different types of plume behavior are summarized below.

Type 1 Behavior

Type 1 behavior occurs where the primary substrate is anthropogenic carbon (e.g., BTEX or landfill leachate), and microbial degradation of this anthropogenic carbon drives reductive dechlorination. When evaluating natural attenuation of a plume exhibiting Type 1 behavior, the following questions must be answered:

- 1) Is the electron donor supply adequate to allow microbial reduction of the chlorinated organic compounds? In other words, will the microorganisms “strangle” before they “starve” (i.e., will they run out of chlorinated aliphatic hydrocarbons used as electron acceptors before they run out of anthropogenic carbon used as the primary substrate)?
- 2) What is the role of competing electron acceptors (e.g., dissolved oxygen, nitrate, iron (III) and sulfate)?
- 3) Is VC oxidized, or is it reduced? Type 1 behavior results in the rapid and extensive degradation of the more highly-chlorinated solvents such as PCE, TCE, and DCE.

Type 2 Behavior

Type 2 behavior dominates in areas that are characterized by relatively high concentrations of biologically available native organic carbon. Microbial utilization of this natural carbon source drives reductive dechlorination (i.e., it is the primary substrate for microorganism growth). When evaluating natural attenuation of a Type 2 chlorinated solvent plume, the same questions as those posed in the description of Type 1 behavior must be answered. Type 2 behavior generally results in slower biodegradation of the highly chlorinated solvents than Type 1 behavior, but under the right conditions (e.g., areas with high natural organic carbon contents), this type of behavior also can result in rapid degradation of these compounds.

Type 3 Behavior

Type 3 behavior dominates in areas that are characterized by inadequate concentrations of native and/or anthropogenic carbon, and concentrations of dissolved oxygen that are greater than 1.0 mg/L. Under these aerobic conditions, reductive dechlorination will not occur. The most significant natural attenuation mechanisms for PCE, TCE, and DCE will be advection, dispersion, and sorption. However, VC can be rapidly oxidized under these conditions. Type 3 behavior also occurs in ground water that does not contain microbes capable of biodegradation of chlorinated solvents.

Mixed Behavior

As mentioned above, a single chlorinated solvent plume can exhibit all three types of behavior in different portions of the plume. This can be beneficial for natural biodegradation of chlorinated aliphatic hydrocarbon plumes. The most fortuitous scenario

involves a plume in which PCE, TCE, and DCE are reductively dechlorinated with accumulation of VC near the source area (Type 1 or Type 2 behavior), then VC is oxidized (Type 3 behavior), either aerobically or via iron reduction further down-gradient. Vinyl chloride is oxidized to carbon dioxide in this type of plume and does not accumulate. The following sequence of reactions occurs in a plume that exhibits this type of mixed behavior.

PCE→TCE→DCE→VC→Carbon Dioxide

In general, TCE, DCE, and VC may attenuate at approximately the same rate, and thus these reactions may be confused with simple dilution. Note that no ethene is produced during this reaction. Vinyl chloride is removed from the system much faster under these conditions than it is under VC reducing conditions. A less desirable scenario, but one in which all contaminants may be entirely biodegraded, involves a plume in which all chlorinated aliphatic hydrocarbons are reductively dechlorinated via Type 1 or Type 2 behavior. Vinyl chloride is reduced to ethene, which may be further reduced to ethane or methane. The following sequence of reactions occurs in this type of plume.

PCE→ TCE→ DCE→VC→Ethene→Ethane

This sequence has been investigated by Freedman and Gossett (1989). In this type of plume, VC degrades more slowly than TCE, and thus tends to accumulate.

2.2.1 Bioattenuation Screening Process

An accurate assessment of the potential for natural biodegradation of chlorinated compounds should be made before investing in a detailed study of natural attenuation. EPA has developed analytical screening criteria for MNA indicator parameters. For most of the chlorinated solvents, the initial biotransformation in the environment is a reductive dechlorination. The initial screening process is designed to recognize geochemical environments where reductive dechlorination is plausible. It is recognized, however, that biodegradation of certain halogenated compounds can also proceed via oxidative pathways. Examples include DCE, VC, the dichloroethanes, chloroethane, dichlorobenzenes, monochlorobenzene, methylene chloride, and ethylene dibromide. The following information is required for the screening process:

- The chemical and geochemical data presented in Table 2.1 of for background and target areas of the plume
- Locations of source(s) and potential points of exposure. If subsurface NAPLs are sources, estimate extent of residual and free-phase NAPL.
- An estimate of the transport velocity and direction of ground-water flow.

Table 2.1 Analytical Parameters and Weighting for Preliminary Screening of Anaerobic Biodegradation Processes

Analysis	Concentrations in Most Contaminated Zone	Interpretation	Value
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	3
Oxygen*	>5 mg/L	Not tolerated; however, VC may be oxidized aerobically	-3
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)- reducing conditions	3
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	2
Sulfide*	>1 mg/L	Reductive pathway possible	3
Methane*	<0.5 mg/L >0.5 mg/L	VC oxidizes Ultimate reductive daughter product, VC Accumulates	0 3
Oxidation Reduction Potential* (ORP) against Ag/AgCl electrode	<50 millivolts (mV) <-100mV	Reductive pathway possible Reductive pathway likely	1 2
pH*	5 < pH < 9 5 > pH > 9	Optimal range for reductive pathway Outside optimal range for reductive pathway	0 -2
TOC	> 20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	2
Temperature*	> 20°C	At T >20°C biochemical process is accelerated	1
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	1
Alkalinity	>2x background	Results from interaction between CO ₂ and aquifer minerals	1
Chloride*	>2x background	Daughter product of organic chlorine	2
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	3
Hydrogen	<1 nM	VC oxidized	0
Volatile Fatty Acids	> 0.1 mg/L	Intermediates resulting from biodegradation of more complex compounds; carbon and energy source	2
BTEX*	> 0.1 mg/L	Carbon and energy source; drives dechlorination	2
Tetrachloroethene		Material released	0
Trichloroethene*		Material released Daughter product of PCE	0 2 _{a/}
DCE*		Material released Daughter product of TCE If cis is > 80% of total DCE it is likely a daughter product 1,1-DCE can be chemical reaction product of TCA	0 2 _{a/}
VC*		Material released Daughter product of DCE	0 2 _{a/}
1,1,1-Trichloroethane*		Material released	0
DCA		Daughter product of TCA under reducing conditions	2

Carbon Tetrachloride		Material released	0
Chloroethane*		Daughter product of DCA or VC under reducing conditions	2
Ethene/Ethane	>0.01mg/L >0.1 mg/L	Daughter product of VC/ethene	2 3
Chloroform		Material released	0
		Daughter product of Carbon Tetrachloride	2
Dichloromethane		Material released	0
		Daughter product of Chloroform	2

* Required analysis. a/ Points awarded only if it can be shown that the compound is a daughter product (i.e., not a constituent of the source NAPL).

Once these data have been collected, the screening process can be undertaken. The following steps summarize the screening processes:

- 1) Determine if biodegradation is occurring using geochemical data. If biodegradation is occurring, locate source(s) and potential points of exposure. If it is not, assess the amount and types of data available. If data are insufficient to determine if biodegradation is occurring, collect supplemental data.
- 2) Determine ground-water flow and solute transport parameters from representative field data. Dispersivity and porosity may be estimated from literature but the hydraulic conductivity and the ground-water gradient and flow direction must be determined from field data. The investigator should use the highest valid hydraulic conductivity measured at the site during the preliminary screening because solute plumes tend to follow the path of least resistance (i.e., highest hydraulic conductivity). This will give the “worst-case” estimate of the solute migration distance over a given period of time. Compare this “worst-case” estimate with the rate of plume migration determined from site characterization data. Determine what degree of plume migration is acceptable or unacceptable with respect to site-specific remediation objectives.
- 3) Locate source(s) and potential points of exposure. If subsurface NAPLs are sources, estimate extent of residual and free-phase NAPL.
- 4) Estimate the biodegradation rate constant. Biodegradation rate constants can be estimated using a conservative tracer found commingled with the contaminant plume. When dealing with a plume that contains chlorinated solvents, this procedure can be modified to use chloride as a tracer. Rate constants derived from microcosm studies can also be used when site specific field data are inadequate or inconclusive. If it is not possible to estimate the biodegradation rate using these procedures, then use a range of accepted literature values for biodegradation of the contaminants of concern. Although literature values may be used to estimate biodegradation rates in the bioattenuation screening process, literature values should not be used in the later more detailed analysis of natural attenuation.
- 5) Compare the rate of transport to the rate of attenuation. Use analytical solutions or a screening model such as BIOSCREEN.

6) Determine if screening criteria are met.

Step 1: Determine if Biodegradation is Occurring

The first step in the screening process is to sample or use existing data and analyze them for the parameters listed in Table 2.1. The sampled areas should include (1) the most contaminated portion of the aquifer (generally in the “source” area with NAPL or high concentrations of contaminants in ground water; (2) down-gradient from the source area but still in the dissolved contaminant plume; (3) down-gradient from the dissolved contaminant plume; and (4) up-gradient and lateral locations that are not impacted by the plume.

The samples collected in the NAPL source area provide information as to the predominant terminal electron-accepting process at the source area. In conjunction with the sample collected in the NAPL source zone, samples collected in the dissolved plume down-gradient from the NAPL source zone allow the investigator (1) to determine if the plume is degrading with distance along the flow path and (2) to determine the distribution of electron acceptors and donors and metabolic by-products along the flow path. The sample collected down-gradient from the dissolved plume aids in plume delineation and allows the investigator to determine if metabolic byproducts are present in an area of ground water that has been remediated. The up-gradient and lateral samples allow delineation of the plume and determination of background concentrations of the electron acceptors and donors.

After these samples have been analyzed for the parameters listed in Table 2.1, the data are analyzed to determine if biodegradation is occurring. The right-hand column of Table 2.1 contains scoring values that can be used as a test to assess the likelihood that biodegradation is occurring. This method relies on the fact that biodegradation will cause predictable changes in ground water chemistry. For example, if the dissolved oxygen concentration in the area of the plume with the highest contaminant concentration is less than 0.5 milligrams per liter (mg/L), 3 points are awarded. Table 2.2 summarizes the range of possible scores and gives an interpretation for each score. If the score totals 15 or more points, it is likely that biodegradation is occurring.

Table 2.2 Interpretation of Points Awarded During Screening Step 1

Score	Interpretation
0 to 5	Inadequate evidence for anaerobic biodegradation* of chlorinated organics
6 to 14	Limited evidence for anaerobic biodegradation* of chlorinated organics
15 to 20	Adequate evidence for anaerobic biodegradation* of chlorinated organics
> 20	Strong evidence for anaerobic biodegradation* of chlorinated organics

**reductive dechlorination*

For this initial CAER for the Facility, S&ME has completed Step 1 of the screening process. In order to complete this step, a series of five background groundwater monitoring events from selected wells. Since the “source” area is believed to be beneath the landfill CAP, and giving consideration to the relatively low dissolved phase concentrations of the COCs and the limited lengths of the exposed portions of the

dissolved phase plumes, the collection of samples from the most contaminated portion of the aquifer (the “source” area) and the near source dissolved phase contaminant plume was not practical. The screening process samples were collected from the areas down-gradient from each source area; and from an up-gradient location that is not impacted by the plume. Monitoring wells II-1, II-2, II-2B, II-7, and II-9 represent the areas down-gradient of the most contaminated portion of the aquifer. Monitoring well II-7B represents groundwater quality in the deeper bedrock aquifer, overlain by and interconnected with the shallow aquifer at monitoring well II-7. Monitoring well MW-14 serves as the Facility’s background well and represents an up-gradient location not impacted by the plume. A preliminary MNA screen sampling event was conducted during April 2007, prior to CAP preparation. The four post-CAP groundwater sampling events were conducted in October 2009, January 2010, April 2010, and July 2010.

Each of the samples collected from the above listed wells during the four post-CAP background groundwater monitoring events were analyzed for the MNA Indicator parameters listed in Table 2.1. The results are illustrated on **Tables 3** through **9**. Based on the points awarded as part of this screening process, there is adequate evidence for anaerobic biodegradation of chlorinated organics at monitoring wells II-1, II-2, II-2B, and II-9. The preliminary screening scores for these wells are likely overly conservative since points were not awarded for the presences of trichloroethene, dichloroethene, and vinyl chloride as biodegradation process daughter products. Giving needed consideration to the portions of the overall dissolved phase groundwater plumes examined by this screening process, it is our opinion that a finding of “adequate evidence for anaerobic biodegradation” supports the use of MNA as an appropriate corrective measure.

The screening process score indicates limited evidence of anaerobic biodegradation at well II-7 and inadequate to limited evidence for anaerobic biodegradation of chlorinated organics in wells II-7B. The point system scores for wells II-7 and II-7B must be considered in light of the current dissolved phase plume position. Recent analytical results for these monitoring wells indicate compliance with 2L standards. Shallow aquifer well II-7 represents groundwater quality down-gradient of the dissolved phase plume, an area not expected to exhibit groundwater chemistry indicating strong evidence for anaerobic biodegradation. As discussed in the Groundwater Model in Section 1.4.2, with the shallow regolith aquifer acting as a reservoir slowly feeding water downward into the bedrock aquifer, as the shallow aquifer impacts attenuate, one could expect the deeper bedrock impacts to attenuate as well. The improvement in groundwater quality measured at bedrock monitoring well II-7B, supports this model. Consideration was also given to the historical analytical results from compliance well II-7 which exhibit a decreasing trend in the concentrations of PCE and TCE over time, while vinyl chloride, a daughter product from the biodegradation of PCE, was later first detected in well II-7 during 2007. These trends are indicative of reductive dechlorination at or up-gradient of well II-7. It is possible that adequate anaerobic biodegradation conditions exist up-gradient of well II-7 and they are responsible for the observed trend of decreasing PCE and TCE concentrations.

Due to the limited accessibility to the entire contaminant plume for monitoring and screening the natural attenuation processes, it is difficult to determine which of the EPA’s three plume behavior types are exhibited. Overall plume behavior is predicted to include

a mixture of all three types. The exposed down-gradient portion of these plumes, monitored by this screening process, are thought to predominantly exhibit Type 3 Behavior for reductive dechlorination.

EPA's analytical screening method for MNA also includes examining certain aquifer and solute transport parameters to predict worse-case plume migration, assessing the potential sources including DNAPL, estimate biodegradation rates, and then analyzing the site specific conditions using an analytical model such as BIOSCREEN.

EPA's screening process is based on a plume from a single point source, and requires the collection of data from multiple points along a flow path, starting in the source area, moving through the core of the plume, and further down-gradient to points at and beyond the leading edge. Groundwater monitoring wells have not been required to be installed directly beneath the Phase II waste management unit; therefore, groundwater quality data from the source area and mid-points along the plume length, needed to conduct and calibrate a proper solute transport model, are not available. It is on this basis that a solute transport model was not prepared, as described in step 2 above of the screening process. Additionally, the rate of plume migration has been adequately determined based on existing seepage velocity data, the dissolved phase plume appears to be stable if not shrinking, and the plume is being adequately remediated prior to intercepting the primary receptor which is Buffalo Creek based on groundwater quality data from the sentinel monitoring wells. Therefore, the degree of plume migration is acceptable with respect to the remediation objectives.

The limited number of points along the plume flow paths, inhibit determining a biodegradation rate constant as suggested in step 4 of the screening process. This condition limits the effective use of either isopleths maps or tracer. As additional COC and MNA indicator data are accumulated as monitoring continues, it may be possible to predict the actual biodegradation rate within the contaminant plume. Literature values for the COCs may also be considered and used in future analyses and reports.

A BIOSCREEN model, such as suggested in step 5 of the screening process has not been prepared. BIOSCREEN modeling requires multiple monitoring points downgradient of the point source of the plume to monitor COC concentrations along the entire flow path starting at the source and migrating down-gradient. The narrow monitored area between the waste management unit and Buffalo Creek is believed to represent only the periphery of the groundwater plume. As discussed earlier, groundwater quality data from the source(s) of the plume and multiple points along the plume flow path have not been obtained; therefore, BIOSCREEN modeling is not practical given these limitations.

Reference EPA's Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater, EPA, September 1998, as well as Evaluation of Enhanced Bioremediation for Reductive Dechlorination of Tetrachloroethene (PCE) Microcosm Study, Felix Y Wang, Virginia Polytechnic Institute and State University, May 2000.

2.3 Physical Changes in Plume Characteristics

In order to control and reduce the release of the constituents of concern from the Phase II waste management unit at the Facility, a low permeability clay cap was added to the top of the waste management unit in 1998. Low permeability caps reduce landfill mass by reducing vertical percolation of rain water into the waste mass through leaching.

In addition to the low permeability clay CAP, the Facility installed an active decomposition methane gas extraction system in 1998. Decomposition gases can directly affect groundwater quality through interaction of the decomposition gas with the upper most prevalent aquifer. Contaminants contained within the decomposition gas can transfer to the monitored aquifer via phase transfer during interaction of gases and liquids. It appears that controlling decomposition gas levels at the Facility has reduced reported concentrations of the COCs in groundwater monitoring events post installation and activation of the active gas extraction system.

Additionally, the active gas extraction wells are de-watered for leachate on an as-needed basis, to maximize the effectiveness of the active gas extraction system. The active dewatering of leachate from the active gas extraction wells appears to have directly reduced the mass of contaminants of concern entering the down-gradient portion of the hydrogeologic regime in Phase II, as well as the overall mass of the contaminant plume as evidenced by a reduction in concentrations of the COCs in the down-gradient compliance monitoring wells observed during the routine compliance monitoring events.

Monitored Natural Attenuation will not change the physical plume characteristics. Once fully established, each EBuffer® is anticipated to remove a sufficient volume of shallow groundwater to influence shallow groundwater flow, resulting in some degree of groundwater upwelling. This theoretical change would enhance the remediation of shallow groundwater migrating from the beneath the waste management unit, and ultimately upwelling and discharging into the adjacent North Buffalo Creek.

2.4 Chemical Changes in Plume Characteristics

As discussed in Section 1.4.3 above, the volatile organic plume in the down-gradient region of Phase II is naturally divided into 5 distinct zones or Areas of Concern (AOC). These AOCs are based on prior points of non-compliance relative to groundwater quality standards and/or with respect to monitoring wells associated with the phytoremediation beds.

The following discussion briefly discusses the most recent groundwater analytical data collected from these AOCs.

Northern EBuffer® Area

Historically, vinyl chloride has been detected in NES well II-9. Sentinel well SMW-3 was installed down-gradient of well II-9, at point near the compliance boundary, and just prior to North Buffalo Creek. As summarized in **Table 10**, vinyl chloride was detected at sentinel well SMW-3 during August and October 2010 at reported concentrations which

exceed the corresponding 2L Standard for vinyl chloride. This monitoring data represents groundwater quality prior to the installation of the corresponding phytoremediation buffer; hereafter, referred to as the Northern EBuffer®. However, vinyl chloride was not detected above the laboratory reporting limit in SMW-3 during the most recent sampling event conducted on October 7, 2011 which represents groundwater quality in this AOC post installation of the corresponding phytoremediation buffer. Additional groundwater quality data is needed to confirm if this dissolved phase contaminant plume is increasing, decreasing, or stable.

Southern EBuffer® Area

As defined in the CAP, due to the proximity of compliance well II-1 to Buffalo Creek, this former compliance well shall function as the sentinel well for this area of the landfill. The CAP identified vinyl chloride, 1,4-dichlorobenzene, and thallium as the constituents of concern at monitor well II-1. During the April and October 2010 monitoring events, benzene, vinyl chloride and 1,4-dichlorobenzene were detected at II-1 at concentrations greater than the corresponding 2L Standard of 6 µg/L. Thallium was not detected above laboratory detection limits.

Benzene was not originally listed as constituent of concern at well II-1 in the CAP; however, it was detected during the April and October 2010 monitoring events at concentrations greater than the corresponding 2L Standard of 1.0 µg/L. This monitoring data represents groundwater quality prior to the installation of the Southern Ebuffer®. However, during the subsequent May 2011 and October 2011 groundwater monitoring events, only 1,4-dichlorobenzene was detected at a reported concentration above the 2L Standard. The May 2011 data represents groundwater quality post installation of the Southern EBuffer. Based on analytical results obtained during routine semi-annual monitoring event, the contaminant plume appears to be stable, with indication of a reducing or shrinking plume suggested.

Area of Concern (AOC) - Well II-6

Compliance well II-6 is located between the waste boundary and the review boundary; up-gradient of sentinel well SMW-4. The CAP identified thallium as a constituent of concern at compliance well II-6; however, it had not been detected at II-6 since April 2006. More recently benzene has been detected periodically at well II-6 at concentrations exceeding the 2L Standard. Based on analytical results obtained during routine semi-annual monitoring event, the dissolved phase volatile organic compound plume appears to be stable.

Sentinel monitoring well SMW-4 is located down-gradient of well II-6, at a point prior to the Compliance Boundary. During the 2010 and 2011 monitoring events, no target analytes were detected at well SMW-4 with concentrations exceeding the corresponding 2L Standard or GPS. This finding suggests that the CAP specified remediation goals were achieved for this area, represented by sentinel well SMW-4.

Area of Concern (AOC) - Well II-7

Tetrachloroethene and vinyl chloride are the CAP listed constituents of concern at the up-gradient compliance monitor well II-7. Based on analytical results obtained during

routine semi-annual monitoring event, the dissolved phase volatile organic compound plume monitored by well II-7 has been declining for years. During the April 10, 2010 sampling event, vinyl chloride was estimated at a concentration of 0.80 µg/L, above the corresponding 2L Standard of 0.03 µg/L; however, it was not detected during the October 2010, May 2011, or October 2011 monitoring events. Tetrachloroethene was listed as the constituent of concern at NES well II-7B; however, it was not detected above the 2L Standard during the April and October 2010, or the May and October 2011 monitoring events. This finding suggests that the CAP specified remediation goals have been achieved for this area, a finding that further supports the Facility's February 2010 request to suspend the installation of the CAP specified phytoremediation buffer in this former area of concern.

Area of Concern (AOC) – Well II-2

Benzene, trichloroethene, tetrachloroethene, vinyl chloride, and thallium were constituents of concern in compliance well II-2. As summarized in Table 10, compliance well II-2 had detections of 1,1-dichloroethane, benzene, trichloroethene, tetrachloroethene, and vinyl chloride at concentrations above their corresponding 2L Standards.

Sentinel well SMW-1 was installed down-gradient of compliance well II-2. As summarized in Table 10, groundwater analytical results for well SMW-1 report no targeted Appendix I volatile organic compounds at concentrations exceeding the 2L Standards. This finding suggests that the CAP specified remediation goals have been achieved for this area, a finding that further supports the Facility's February 2010 request to suspend the installation of the CAP specified phytoremediation buffer in this former area of concern.

Cadmium was reported in well SMW-1 at a concentration of 4.79 µg/L during the October 1, 2010 sampling event. This concentration exceeds the NCAC 2L standard of 2 ug/l. The reported non-detection of cadmium up-gradient of SMW-1 at compliance well II-2 during the April 2010, October 2010, and May 2011 monitoring events, suggests that the landfill may not be source of this constituent. Considering the absence of an established landfill source for the cadmium detected at SMW-1, the October 1, 2010 detection of cadmium is thought to be an anomaly potentially associated with suspended solids in water column.

Laboratory analytical results for the October 2011 sentinel monitoring wells are attached in **Appendix I**. Laboratory analytical reports results summarized herein for wells II-2, II-6, II-7, II-7B, and II-9 were submitted as part of the routine monitoring.

2.5 Refining the Site Conceptual Model

Since the preparation of the CAP, no physical changes in groundwater flow regime have been observed. However, certain beneficial chemical changes to the dissolved groundwater plumes have been documented.

The original CAP prepared in July of 2008 called for the installation of a continuous phytoremediation bed beginning at the mid-point between monitoring wells II-2B and II-13 and continuing west and south to the midpoint between compliance wells II-7B and II-10 as illustrated on Figure 7 of previously submitted White Street Landfill Corrective Action Plan, S&ME, Inc., July 2008, revised April 30, 2009. Additionally, the CAP also proposed to install a second continuous phytoremediation bed beginning just northeast of compliance well II-1 and continuing to a point southwest of compliance well II-12 as illustrated on Figure 7 of the previously submitted CAP.

Subsequent to the completion and approval of the CAP additional groundwater quality data was obtained, which demonstrated a reduction in the CAP listed constituents of concern and projecting a potential for achieving groundwater quality compliance near term at select compliance points without implementation of additional corrective measures. On February 3, 2010 S&ME submitted a Request to Suspend Construction of Select Phytoremediation Beds (Amendment to Corrective Action Plan) to NCDENR. The request included:

1. Elimination of thallium as a current COCs requiring corrective measure, thereby, eliminating the need to construct phytoremediation beds at locations associated with wells II-6, II-11, and II-12.
2. Installing sentinel well SMW-4 and assessing groundwater quality prior to the installation of the phytoremediation bed associated with well II-6. Considering the close proximity of compliance well II-6 to the waste boundary, if groundwater quality at SMW-4 documented compliant conditions, installation of the phytoremediation bed associated with well II-6 would be postponed until required by regulation.
3. Suspending the installation of phytoremediation beds in the area of well II-7 based the concentrations of COCs at monitoring well II-7 and the minute degree of separation between the current COC concentrations and the corresponding 2L Standards. The CAP approved MNA program would be implemented at II-7.

On April 29, 2010, NCDENR approved the requested suspension of the installation of sentinel monitoring wells SMW-2 and SMW-5 and the certain Phytoremediation Beds.

For the revised CAP implementation, three new sentinel monitoring wells were installed down-gradient of each of the compliance and former NES monitoring well in which current COCs have been detected at concentrations exceeding the 2L Standard.

Between July 8 and 9, 2010, sentinel monitoring wells SMW-1, SMW-3, and SMW-4 were installed down-gradient of monitored unit Phase II, prior to North Buffalo Creek, and prior to the Compliance Boundary. Sentinel well SMW-1 was installed down-gradient of compliance well II-2, SMW-3 was installed down-gradient of NES well II-9, and SMW-4 was installed down-gradient of compliance well II-6. These wells will serve to monitor groundwater quality after interaction with the phytoremediation beds and/or prior to groundwater discharging to North Buffalo Creek. The wells monitor the same portion of the uppermost aquifer as the affected compliance or NES wells up-gradient of their location. The locations of the sentinel monitoring wells are illustrated on Figures 4 through 7. The installations of these wells are discussed in detail in the White Street

Landfill Installation Report, Ebuffer and Sentinel Wells prepared by S&ME dated September 29, 2011.

On April 3, 2011, S&ME and Ecolotree commenced with the installation of two EBuffer® units along select portion of White Street Landfill, Phase II. One EBuffer® referred to as the North EBuffer® as installed between NES well II-9 and sentinel well SMW-3. The second EBuffer® referred to as the South EBuffer® was installed in the vicinity of compliance well II-1. Figures 4 through 7 depict the EBuffer® locations and the locations for groundwater monitoring wells.

No other changes to the site conceptual model have been made to the NCDENR approved CAP.

2.6 Status of Impacts at the Potential Points of Compliance

Several organic compounds including the volatile organic compounds benzene, trichloroethene, tetrachloroethene, vinyl chloride, 1,1-dichloroethene, and 1,4-dichlorobenzene as well as the inorganic constituent thallium have exceeded the 2L standards and/or the North Carolina Department of Environment and Natural Resources (NCDENR) Groundwater Protection Standards (GPS) within the Phase II portion of the White Street Landfill compliance monitoring well network. In December 2010, 15A NCAC 2L groundwater quality standards were revised to incorporate new Interim Maximum Allowable Concentrations (IMACs) for select parameters. The solid waste section adopted the IMACs as their current groundwater protection standards (GPS). Since promulgation of the new IMACs, the inorganic constituents cobalt and vanadium have exceeded their respective IMAC.

During 2007, S&ME completed an Alternate Source Demonstration (ASD) for metals. The results of the ASD successfully demonstrated that the concentrations of several naturally-occurring metals including cobalt and vanadium within the in-situ soil at the Facility were sufficient to influence the concentrations of these metals in groundwater samples collected from the down-gradient groundwater monitoring wells. Based on the ASD findings, the reporting of cobalt and vanadium at concentrations above their respective 15A NCAC 2L IMAC standards is not due to a release by the Facility, but instead may be the result of the natural occurrence of these metals in the native, residual soil. Based on the ASD findings the concentrations of cobalt and vanadium reported herein are thought to reflect naturally occurring conditions, and thus should not be considered an exceedance of the 15A NCAC 2L standards (2L Standards) and therefore, triggering the need for corrective measures.

Thallium, which was originally a COC in certain down-gradient compliance monitoring wells, has not been detected above the 2L Standard in any compliance monitoring well since April 2007, and therefore thallium is no longer considered a COC.

The following provides a brief discussion of the analytical results for each sentinel well and each area of concern as identified in the CAP and/or the phytoremediation beds discussed in Section 2.4.

Recent groundwater monitoring events indicate that the VOC plume remains in the vicinity of the Northern EBuffer and Southern EBuffer Areas in the vicinity of wells II-1 and NES well II-9. In order to restore groundwater quality in these AOCs and in accordance with the NCDENR approved CAP, S&ME installed two in-situ phytoremediation beds, one in each of these AOCs as illustrated on Figures 4 through 7 of this report. The installation of these beds were performed in accordance with the approved CAP and were documented in the White Street Landfill Installation Report, Ebuffer and Sentinel Wells prepared by S&ME dated September 29, 2011.

Sentinel monitoring well SMW-3 was installed down-gradient of NES well II-9 and its associated EBuffer®. Groundwater samples were collected from SMW-3 on August 2, 2010, October 11, 2010, and October 7, 2011. The most recent October 7, 2011 results show that none of the targeted compliance parameters exceed their respective 2L Standards in SMW-3.

Additionally, The VOC plume remains in the AOCs in vicinity of wells II-6, II-7, and II-7B. S&ME installed Sentinel Monitoring Well SMW-4 down-gradient of well II-6 between this wells and the compliance boundary in Buffalo Creek. Groundwater samples were also collected from SMW-4 on August 2, 2010, October 11, 2010, and October 7, 2011. The results of these groundwater sampling events show that none of the targeted compliance parameters or COCs were detected above the laboratory reporting limit in SMW-1. Additionally, at wells II-7 and II-7B representing the remaining AOC within the VOC plume, the only COC detected above the 2L Standard during the four most recent groundwater monitoring events was vinyl chloride which was reported at an estimated “J” flagged concentration of 0.80 µg/L during the April 1, 2010 monitoring event. Since April 2010, no volatile organic compounds have been detected in wells II-7 or II-7B at reported concentrations above the 2L Standards. The plume mass in the vicinity of wells II-7 and II-7B has been dramatically reduced.

The VOC plume also remains in the AOC which occurred in vicinity of wells II-2 and NES well II-2B. In order to monitor migration of the COCs in this AOC, S&ME installed Sentinel Monitoring Well SMW-1 down-gradient of these wells between these wells and the compliance boundary in Buffalo Creek. Groundwater samples were collected from SMW-1 on August 2, 2010, October 11, 2010, and October 7, 2011. The results of these groundwater sampling events show that none of the targeted compliance parameters or COCs exceed their respective 2L Standards in SMW-1.

Based on these results, the COCs identified within the compliance monitoring wells are not exceeded the 2L Standards at the compliance monitoring points which are represented by the recently installed sentinel monitoring wells SMW-1, SMW-3, and SMW-4.

2.7 Offsite Migration of COCs

As part of the previously submitted Nature and Extent Study, S&ME completed a drinking water receptor survey to visually look for evidence of drinking water wells within a quarter mile radius of the compliance monitoring wells in which groundwater impact has been detected. This visual survey was completed from a vehicle traveling along public roads and right-of-ways within the quarter mile radius.

The results of our survey show that there are five (5) drinking water wells within a quarter mile radius of the impacted compliance monitoring wells II-2 and II-7. The drinking water wells were identified on the opposite side of North Buffalo Creek from the landfill and are at a topographically higher elevation than the landfill. North Buffalo Creek is a local hydraulic divide for the uppermost prevalent aquifer

Based on these findings and the distance of the wells from the compliance wells showing impacts, the risk to these drinking water wells from the constituents of concern from the landfill is expected to be low. A map showing the locations of the identified drinking water wells within a quarter mile radius of compliance wells II-2 and II-7 was included in the previously submitted CAP.

North Buffalo Creek is the primary receptor of groundwater influenced by the Facility. North Buffalo Creek is classified as a Class C stream by NC DENR. There are no known public water outtakes from North Buffalo Creek within a 1 mile radius of the White Street Landfill. There is, however, a waste water treatment plant located immediately upstream of the Facility.

While a formal benthic study of the section of North Buffalo Creek influenced by the White Street Landfill has not been completed, the risk, if any, associated with the release of the primary constituents of concern (COCs) from the Facility will be to the aquatic life in North Buffalo Creek.

The Facility has historically, and currently does, monitored surface water quality upstream as well as downstream of the landfill. Based upon the surface water quality monitoring results, there have been no exceedances of the 15A NCAC 2B surface water standards for any of the COCs in the portion of North Buffalo Creek influenced by the Facility. Therefore, the risk to aquatic life in North Buffalo Creek from discharging groundwater influenced by the Facility is expected to be low.

3.0 CONCLUSIONS

3.1 Modifications to Selected Remedy

Based on the groundwater monitoring results compiled from the Sentinel Monitoring wells, the Facility is in compliance at the NCDENR approved compliance monitoring points which are represented by Sentinel Monitoring Well SMW-1, SMW-3, and SMW-4. Therefore, no changes to the selected remedy are needed to address these former CAP areas of concern.

Overall, groundwater quality has shown improvement in Phase II. This report finds that there is adequate evidence to support the continued application of MNA in the areas investigated and covered by the CAP. The remaining two CAP required phytoremediation Ebuffers® were installed during 2011, and it will take several years for tree growth to be adequate to consider the Ebuffers® as functional. Therefore, the approved remedies of phytoremediation coupled with monitored natural attenuation, and

maintaining consistent contours within Phase II, appear capable of restoring groundwater quality in the Phase II portion of the Facility. No modifications to the selected remedy are proposed.

3.2 Supplemental Risk Assessment

Based on the results discussed in this report, no supplemental risk assessment is needed for the Facility.

3.3 Contingency Plan and Land Use Restrictions

Due to the effectiveness of the selected remedy and the improved groundwater quality results, and compliance with the 2L Standards at the compliance monitoring points, the Facility's contingency plan does not need to be implemented at this time. Additionally, no land use restrictions are warranted since the COC plume does not appear to be migrating beyond the compliance boundary and the risk to sensitive receptors is low.

4.0 REFERENCES

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TABLES

TABLE 1
GROUNDWATER ELEVATION DATA SUMMARY
PHASE II - WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Well No.	Type	Elevation TOC (feet)	Depth of Well (feet)	Static Water Levels			
				October 2011		May 2011	
				DTGW (feet)	Elevation (feet)	DTGW (feet)	Elevation (feet)
II-1	Compliance	692.34	26.50	16.86	675.48	15.13	677.21
II-2	Compliance	690.05	32.24	20.23	669.82	19.37	670.68
II-3	Compliance	688.05	32.45	17.51	670.54	16.92	671.13
II-4	Compliance	703.27	28.72	15.96	687.31	10.33	692.94
II-5	Compliance	714.31	15.96	7.18	707.13	6.91	707.40
II-6	Compliance	698.47	20.57	13.10	685.37	10.87	687.60
II-7	Compliance	684.08	27.54	14.02	670.06	13.69	670.39
II-7B	NES	687.21	101.50	17.27	669.94	17.04	670.17
II-8	Compliance	707.09	34.95	9.57	697.52	9.19	697.90
II-9	NES	697.01	25.10	NG	--	NG	--
II-10	NES	703.90	23.40	NG	--	NG	--
II-11	NES	701.77	26.60	NG	--	NG	--
II-12	Compliance	700.97	22.90	10.44	690.53	10.06	690.91
MW-13	Compliance	741.30	33.78	21.98	719.32	18.91	722.39
MW-14	Compliance	765.30	34.28	31.92	733.38	27.13	738.17

TOC = Top of Casing. Elevations determined by survey: HDR Engineering, Inc.

Depth of well data as reported by BPA Environmental & Engineering, Inc.

DTGW = Depth to Groundwater

Elevation = calculated groundwater elevation

NG = Not Gauged

TABLE 2
GROUNDWATER VELOCITY DATA - OCTOBER 2011
PHASE II - WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Well No.	Representing Corrective Measure Area	Hydraulic Conductivity (K = feet/day)	Porosity (n = %)	Gradient (I = feet/feet)	Groundwater Velocity (V= feet/day)
II-1	Southern EBuffer	0.119	0.2	0.024	0.014
II-2	Suspended	0.329	0.2	0.015	0.025
II-3		0.380	0.2	0.024	0.045
II-4		0.200	0.2	0.038	0.038
II-5		0.042	0.2	0.037	0.008
II-6		0.221	0.2	0.015	0.017
II-7	Suspended	1.077	0.2	0.008	0.040
II-8		2.353	0.2	0.016	0.192
II-9	Northern Ebuffer				
MW-14		0.740	0.2	0.015	0.054

*Notes: Hydraulic Conductivity's from slug test data by BPA Environmental & Engineering Inc.
and HDR Engineering
Porosity values from published literature, based on soil types
Gradients are based upon groundwater elevation data from this monitoring event
Velocity calculated using $V = KI/n$
NA = Not Applicable, deeper aquifer monitoring well*

TABLE 3
GROUNDWATER ANALYTICAL RESULTS SCREENING
OF ANAEROBIC BIODEGRADATION PROCESSES
SENTINEL WELL II-1
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Parameters	April 2007	Point Value	October 2009	Point Value	January 2010	Point Value	April 2010	Point Value	August 2010	Point Value
Temperature (°C)	13.36	0	13.46	0	7.07	0	13.88	0	20.34	1
pH (s.u.)	6.33	0	8.58	0	10.61	-2	6.23	0	6.87	0
Oxygen (mg/L)	0.47	3	0.74	2	1.74	0	0.51	2	0.49	3
ORP	-316	2	46	1	15	1	245	0	186	0
Iron, Ferrous (mg/L)	0.042	0	3.3	3	0.34	0	0.66	0	3.3	3
Dissolved Hydrogen	NA		0.68	0	2.1	3	4.10	3	4.8	3
Chloride (mg/L)	450	2	410	2	520	2	390	2	410	2
Nitrate (mg/L)	0.015	2	0.028	2	0.025	2	BQL	0	0.062	2
Sulfate (mg/L)	25	0	12	2	18	2	14	2	12	0
Sulfide (mg/L)	0.1	0	BQL	0	BQL	0	BQL	0	BQL	0
Alkalinity (mg/L)	NA		320	1	390	1	350	1	580	1
Total Organic Carbon (mg/L)	15	0	30	2	30	2	23	2	34	2
Carbon Dioxide (mg/L)	NA		733	1	525	1	544	1	829	1
Ethane/Ethene (mg/L)	NA		BQL	0	BQL	0	0.0007	0	BQL	0
Methane (mg/L)	0.135	0	0.266	0	0.0009	0	0.007	0	0.213	0
Volatile Fatty Acids (mg/L)	NA		28.4	2	29.8	2	BQL	0	2.600	2
BTEX (ug/L)	BQL	0	1.4	2	0.99	2	0.72	2	1.4	2
Trichloroethene (ug/L)	BQL	0	0.91	0	0.41	0	0.55	0	0.62	0
Dichloroethene (ug/L)	BQL	0	3.0	0	2.2	0	BQL	0	4.9	0
Vinyl Chloride (ug/L)	BQL	0	1.6	0	BQL	0	0.49	0	1.5	0
1,1,1 Trichloroethane (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
Chloroethane (ug/L)	BQL	0	1.7	0	BQL	0	0.74	0	1.5	0
Total Point Value Score	--	9		20	--	16	--	15	--	22

Interpretation of Points Awarded

0 to 5 = Inadequate evidence of anaerobic biodegradation of chlorinated organics

6 to 14 = Limited evidence for anaerobic biodegradation of chlorinated organics

14 to 20 = Adequate evidence for anaerobic biodegradation of chlorinated organics

> 20 = Strong evidence of anaerobic biodegradation of chlorinated organics

BQL = Below Quantitation Limits

Orange shaded cells = points awarded only if the compound is a daughter product

NA = Not analyzed for parameter

TABLE 4
GROUNDWATER ANALYTICAL RESULTS SCREENING
OF ANAEROBIC BIODEGRADATION PROCESSES
MONITORING WELL II-2
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Parameters	April 2007	Point Value	October 2009	Point Value	January 2010	Point Value	April 2010	Point Value	August 2010	Point Value
Temperature (°C)	17.86	0	14.92	0	9.77	0	14.78	0	22.55	1
pH (s.u.)	6.86	0	9.51	-2	11.29	-2	6.84	0	7.48	0
Oxygen (mg/L)	0.78	2	0.7	2	1.96	0	6.23	-3	2.21	-1
ORP	-302	2	-113	2	-131	2	182	0	142	0
Iron, Ferrous (mg/L)	0.042	0	0.5	0	0.98	0	1.73	3	0.79	0
Dissolved Hydrogen	NA		1.2	3	2	3	4.5	3	0.91	2
Chloride (mg/L)	12	2	11	2	13	2	12	2	12	2
Nitrate (mg/L)	0.013	2	BQL	2	0.031	2	BQL	2	0.029	2
Sulfate (mg/L)	25	0	27	0	25	0	19	2	21	0
Sulfide (mg/L)	0.1	0	BQL	0	BQL	0	BQL	0	BQL	0
Alkalinity (mg/L)	NA		370	1	360	1	330	1	460	1
Total Organic Carbon (mg/L)	2.2	0	0.88	0	1.5	0	2.0	0	1.300	2
Carbon Dioxide (mg/L)	NA		110	0	131	0	164	0	175	0
Ethane/Ethene (mg/L)	NA		BQL	0	BQL	0	BQL	0	BQL	0
Methane (mg/L)	3.49	3	1.06	3	1.35	3	1.47	3	1.300	3
Volatile Fatty Acids (mg/L)	NA		0.17	2	0.879	2	BQL	0	BQL	0
BTEX (ug/L)	1.4	2	1.9	2	1.8	2	0.79	2	0.88	2
Trichloroethene (ug/L)	BQL	0	4.7	0	3.9	0	2.6	0	4.1	0
Dichloroethene (ug/L)	6.8	0	20	0	21	0	12	0	20	0
Vinyl Chloride (ug/L)	3.2	0	5.4	0	5.7	0	3.3	0	4.8	0
1,1,1 Trichloroethane (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
Chloroethane (ug/L)	BQL	0	0.61	0	BQL	0	BQL	0	BQL	0
Total Point Value Score	--	13		17	--	15	--	15	--	14

Interpretation of Points Awarded

0 to 5 = Inadequate evidence of anaerobic biodegradation of chlorinated organics

6 to 14 = Limited evidence for anaerobic biodegradation of chlorinated organics

14 to 20 = Adequate evidence for anaerobic biodegradation of chlorinated organics

> 20 = Strong evidence of anaerobic biodegradation of chlorinated organics

BQL = Below Quantitation Limits

NA = Not analyzed for parameter

Orange shaded cells = points awarded only if the compound is a daughter product

TABLE 5
GROUNDWATER ANALYTICAL RESULTS SCREENING
OF ANAEROBIC BIODEGRADATION PROCESSES
MONITORING WELL II-2B
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Parameters	April 2007	Point Value	October 2009	Point Value	January 2010	Point Value	April 2010	Point Value	August 2010	Point Value
Temperature (°C)	19.22	0	17.84	0	10.47	0	18.07	0	21.77	1
pH (s.u.)	6.32	0	9.12	-2	6.44	0	6.20	0	7.01	0
Oxygen (mg/L)	0.16	3	0.7	2	0.46	3	0.64	2	0.53	2
ORP	-373	2	-113	2	-70	1	211	0	172	0
Iron, Ferrous (mg/L)	1.7	3	3.13	3	1.96	3	2.92	3	2.67	3
Dissolved Hydrogen	NA		1.4	3	1.1	3	3.8	3	6.0	3
Chloride (mg/L)	11	2	10	2	11	2	11	2	11	2
Nitrate (mg/L)	0.01	2	0.41	2	0.032	2	BQL	2	BQL	2
Sulfate (mg/L)	25	0	21	0	22	0	21	0	21	0
Sulfide (mg/L)	0.1	0	BQL	0	BQL	0	BQL	0	BQL	0
Alkalinity (mg/L)	NA		220	1	210	1	200	1	310	1
Total Organic Carbon (mg/L)	3.3	0	2.1	0	2.6	0	2.1	0	2.400	0
Carbon Dioxide (mg/L)	NA		235	1	260	1	354	1	341	1
Ethane/Ethene (mg/L)	NA		BQL	0	BQL	0	BQL	0	BQL	0
Methane (mg/L)	2.33	3	1.13	3	0.384	0	1.33	3	0.692	3
Volatile Fatty Acids (mg/L)	NA		0.46	2	BQL	0	BQL	0	BQL	0
BTEX (ug/L)	BQL	0	BQL	0	1.2	2	1.1	2	0.98	2
Trichloroethene (ug/L)	BQL	0	BQL	0	2.5	0	2.5	0	2.8	0
Dichloroethene (ug/L)	BQL	0	BQL	0	17	0	16	0	15	0
Vinyl Chloride (ug/L)	BQL	0	BQL	0	4	0	3.5	0	3.4	0
1,1,1 Trichloroethane (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
Chloroethane (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
Total Point Value Score	--	15		19	--	18	--	19	--	20

Interpretation of Points Awarded

0 to 5 = Inadequate evidence of anaerobic biodegradation of chlorinated organics

6 to 14 = Limited evidence for anaerobic biodegradation of chlorinated organics

14 to 20 = Adequate evidence for anaerobic biodegradation of chlorinated organics

> 20 = Strong evidence of anaerobic biodegradation of chlorinated organics

BQL = Below Quantitation Limits

Orange shaded cells = points awarded only if the compound is a daughter product

NA = Not analyzed for parameter

TABLE 6
GROUNDWATER ANALYTICAL RESULTS SCREENING
OF ANAEROBIC BIODEGRADATION PROCESSES
SENTINEL WELL II-7
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Parameters	April 2007	Point Value	October 2009	Point Value	January 2010	Point Value	April 2010	Point Value	August 2010	Point Value
Temperature (°C)	14.27	0	12.15	0	11.43	0	18.12	0	25.17	1
pH (s.u.)	5.42	0	8.29	0	5.56	0	5.5	0	6.15	0
Oxygen (mg/L)	0.96	2	2.48	0	1.61	0	5.1	-3	0.61	2
ORP	-268	2	92	0	1	1	332	0	310	0
Iron, Ferrous (mg/L)	0.042	0	0.18	0	0.25	0	0.1	0	0.01	0
Dissolved Hydrogen	NA		2.6	3	3.7	3	5.8	3	1.5	3
Chloride (mg/L)	4.3	0	58	2	12	2	18	2	16	2
Nitrate (mg/L)	2.2	0	0.33	2	0.27	2	BQL	2	0.130	2
Sulfate (mg/L)	4.7	2	23	0	11	2	14	2	12	2
Sulfide (mg/L)	0.1	0	BQL	0	BQL	0	BQL	0	BQL	0
Alkalinity (mg/L)	NA		59	1	83	1	70	1	510	1
Total Organic Carbon (mg/L)	1.3	0	7.3	0	4.0	0	3.5	0	2.800	0
Carbon Dioxide (mg/L)	NA		320	1	393	1	430	1	409	1
Ethane/Ethene (mg/L)	NA		BQL	0	BQL	0	BQL	0	BQL	0
Methane (mg/L)	0.009	0	0.45	0	0.055	0	0.029	0	0.010	0
Volatile Fatty Acids (mg/L)	NA		0.64	2	0.045	0	BQL	0	BQL	0
BTEX (ug/L)	BQL	0	BQL	0	2.09	2	1.27	2	BQL	0
Trichloroethene (ug/L)	BQL	0	0.48	0	BQL	0	BQL	0	BQL	0
Dichloroethene (ug/L)	1.1	0	0.94	0	3.9	0	3.5	0	0.71	0
Vinyl Chloride (ug/L)	BQL	0	0.47	0	1.0	0	0.75	0	BQL	0
1,1,1 Trichloroethane (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
Chloroethane (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
Total Point Value Score	--	6		11	--	14	--	10	--	14

Interpretation of Points Awarded

0 to 5 = Inadequate evidence of anaerobic biodegradation of chlorinated organics

6 to 14 = Limited evidence for anaerobic biodegradation of chlorinated organics

14 to 20 = Adequate evidence for anaerobic biodegradation of chlorinated organics

> 20 = Strong evidence of anaerobic biodegradation of chlorinated organics

BQL = Below Quantitation Limits

Orange shaded cells = points awarded only if the compound is a daughter product

NA = Not analyzed for parameter

TABLE 7
GROUNDWATER ANALYTICAL RESULTS SCREENING
OF ANAEROBIC BIODEGRADATION PROCESSES
SENTINEL WELL II-7B
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Parameters	April 2007	Point Value	October 2009	Point Value	January 2010	Point Value	April 2010	Point Value	August 2010	Point Value
Temperature (°C)	15.14	0	11.7	0	9.22	0	14.19	0	23.19	1
pH (s.u.)	10.43	-2	13.6	-2	10.48	-2	10.49	-2	11.14	-2
Oxygen (mg/L)	0.92	2	0.81	2	0.52	2	2.59	0	1.96	0
ORP	-282	2	-126	2	-127	2	159	0	94	0
Iron, Ferrous (mg/L)	0.042	0	0.02	0	0.01	0	0.07	0	0.13	0
Dissolved Hydrogen	NA		1	2	3.6	3	5.0	3	1.1	3
Chloride (mg/L)	4.8	0	4.7	0	3.8	0	4.8	0	4.800	0
Nitrate (mg/L)	0.023	2	0.28	2	0.25	2	0.23	2	0.140	2
Sulfate (mg/L)	0.1	2	100	0	100	0	100	0	100	0
Sulfide (mg/L)	0.1	0	BQL	0	BQL	0	BQL	0	BQL	0
Alkalinity (mg/L)	NA		99	1	95	1	110	1	100	1
Total Organic Carbon (mg/L)	3.1	0	2.5	0	2.5	0	2.3	0	2.300	0
Carbon Dioxide (mg/L)	NA		BQL	0	BQL	0	BQL	0	BQL	0
Ethane/Ethene (mg/L)	NA		BQL	0	BQL	0	BQL	0	BQL	0
Methane (mg/L)	0.003	0	0.023	0	0.006	0	0.002	0	0.003	0
Volatile Fatty Acids (mg/L)	NA		0.53	2	BQL	0	BQL	0	BQL	0
BTEX (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
Trichloroethene (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
Dichloroethene (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
Vinyl Chloride (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
1,1,1 Trichloroethane (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
Chloroethane (ug/L)	BQL	0	BQL	0	BQL	0	BQL	0	BQL	0
Total Point Value Score	--	6		9	--	8	--	4	--	5

Interpretation of Points Awarded

0 to 5 = Inadequate evidence of anaerobic biodegradation of chlorinated organics

6 to 14 = Limited evidence for anaerobic biodegradation of chlorinated organics

14 to 20 = Adequate evidence for anaerobic biodegradation of chlorinated organics

> 20 = Strong evidence of anaerobic biodegradation of chlorinated organics

BQL = Below Quantitation Limits

Orange shaded cells = points awarded only if the compound is a daughter product

NA = Not analyzed for parameter

TABLE 8
GROUNDWATER ANALYTICAL RESULTS SCREENING
OF ANAEROBIC BIODEGRADATION PROCESSES
MONITORING WELL II-9
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Parameters	April 2007	Point Value	October 2009	Point Value	January 2010	Point Value	April 2010	Point Value	August 2010	Point Value
Temperature (°C)	15.37	0	14.77	0	11.28	0	16.37	0	20.45	1
pH (s.u.)	5.51	0	9.25	-2	6.23	0	6.14	0	7.03	0
Oxygen (mg/L)	0.19	3	0.36	3	1.02	0	0.81	1	0.15	3
ORP	-319	2	-46	1	75	0	367	0	274	0
Iron, Ferrous (mg/L)	0.042	0	0.39	0	0.07	0	0.06	0	0.08	0
Dissolved Hydrogen	NA		1.1	3	BQL	0	3.6	3	0.89	2
Chloride (mg/L)	6	0	10	2	6.5	2	12	2	11	2
Nitrate (mg/L)	0.41	2	0.077	2	0.25	2	0.12	2	0.130	2
Sulfate (mg/L)	40	0	16	2	51	0	27	0	15	2
Sulfide (mg/L)	0.1	0	BQL	0	BQL	0	BQL	0	BQL	0
Alkalinity (mg/L)	NA		190	1	92	1	110	1	320	1
Total Organic Carbon (mg/L)	9.2	0	2.5	0	4.1	0	4.5	0	3.000	0
Carbon Dioxide (mg/L)	NA		280	1	201	1	295	1	307	1
Ethane/Ethene (mg/L)	NA		BQL	0	BQL	0	BQL	0	BQL	0
Methane (mg/L)	0.002	0	0.085	0	0.0009	0	0.006	0	0.030	3
Volatile Fatty Acids (mg/L)	NA		0.39	2	BQL	0	0.95	2	BQL	0
BTEX (ug/L)	BQL	0	NA		BQL	0	BQL	0	BQL	0
Trichloroethene (ug/L)	BQL	0	NA		BQL	0	BQL	0	BQL	0
Dichloroethene (ug/L)	BQL	0	NA		4.2	0	11	0	20	0
Vinyl Chloride (ug/L)	BQL	0	NA		BQL	0	0.66	0	2.6	0
1,1,1 Trichloroethane (ug/L)	BQL	0	NA		BQL	0	BQL	0	BQL	0
Chloroethane (ug/L)	BQL	0	NA		BQL	0	BQL	0	0.46	2
Total Point Value Score	--	7		15	--	6	--	12	--	19

Interpretation of Points Awarded

0 to 5 = Inadequate evidence of anaerobic biodegradation of chlorinated organics

6 to 14 = Limited evidence for anaerobic biodegradation of chlorinated organics

14 to 20 = Adequate evidence for anaerobic biodegradation of chlorinated organics

> 20 = Strong evidence of anaerobic biodegradation of chlorinated organics

BQL = Below Quantitation Limits

NA = Not analyzed for parameter

Orange shaded cells = points awarded only if the compound is a daughter product

TABLE 9
GROUNDWATER ANALYTICAL RESULTS SCREENING
OF ANAEROBIC BIODEGRADATION PROCESSES
BACKGROUND WELL MW-14
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Parameters	Average	October 2009	Point Value	January 2010	Point Value	April 2010	Point Value	August 2010	Point Value
Temperature (°C)		18.5	0	14.41	0	21.23	1	21.23	1
pH (s.u.)	6.29	8.69	0	5.78	0	5.35	0	5.35	0
Oxygen (mg/L)	3.72	3.47	0	1.56	0	4.92	0	4.92	0
ORP	257	37	1	99	0	446	0	446	0
Iron, Ferrous (mg/L)	0.023	0.01	0	0.04	0	0.02	0	0.02	0
Dissolved Hydrogen		1	2	BQL	0	3.4	3	0.82	0
Chloride (mg/L)	3.25	3.3	0	2.1	0	3.9	0	3.700	0
Nitrate (mg/L)		0.017	2	BQL	2	BQL	2	BQL	2
Sulfate (mg/L)		2	2	1.2	2	BQL	2	1.500	2
Sulfide (mg/L)		BQL	0	BQL	0	BQL	0	BQL	0
Alkalinity (mg/L)	20	19	0	23	0	16	0	20	0
Total Organic Carbon (mg/L)		BQL	0	BQL	0	0.32	0	0.400	2
Carbon Dioxide (mg/L)	98	85.5	0	71.4	0	111	0	126	0
Ethane/Ethene (mg/L)		BQL	0	BQL	0	BQL	0	BQL	0
Methane (mg/L)		0.001	0	0.001	0	BQL	0	BQL	0
Volatile Fatty Acids (mg/L)		0.58	2	BQL	0	BQL	0	BQL	0
BTEX (ug/L)		BQL	0	BQL	0	BQL	0	BQL	0
Trichloroethene (ug/L)		BQL	0	BQL	0	BQL	0	BQL	0
Dichloroethene (ug/L)		BQL	0	BQL	0	BQL	0	BQL	0
Vinyl Chloride (ug/L)		BQL	0	BQL	0	BQL	0	BQL	0
1,1,1 Trichloroethane (ug/L)		BQL	0	BQL	0	BQL	0	BQL	0
Chloroethane (ug/L)		BQL	0	BQL	0	BQL	0	BQL	0
Total Point Value Score	--	--	9	--	4	--	8	--	7

Interpretation of Points Awarded

0 to 5 = Inadequate evidence of anaerobic biodegradation of chlorinated organics

6 to 14 = Limited evidence for anaerobic biodegradation of chlorinated organics

14 to 20 = Adequate evidence for anaerobic biodegradation of chlorinated organics

> 20 = Strong evidence of anaerobic biodegradation of chlorinated organics

BQL = Below Quantitation Limits

Orange shaded cells = points awarded only if the compound is a daughter product

NA = Not analyzed for parameter

TABLE 10
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED VOLATILE ORGANIC COMPOUNDS
SELECT WELLS LOCATED WITHIN WHITE STREET LANDFILL - PHASE II
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Well ID Date Collected units	AOC II-2										NC SWSL (ug/L)	NCAC 2L Std. (ug/L)
	Sample Locations											
	II-2 4/1/10 (ug/L)	II-2 10/6/10 (ug/L)	II-2 5/10/11 (ug/L)	II-2 10/12/11 (ug/L)	II-2B 1/14/10 (ug/L)	II-2B 4/29/10 (ug/L)	II-2B 8/3/10 (ug/L)	SMW-1 8/2/10 (ug/L)	SMW-1 10/11/10 (ug/L)	SMW-1 10/7/11 (ug/L)		
1,1-Dichloroethane	16	17	16	12	NA	NA	NA	ND	ND	ND	5	6
1,1-Dichloroethene	0.45 J	0.49J	ND	ND	NA	NA	NA	ND	ND	ND	5	7
1,2-Dichlorobenzene	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	5	20
1,4-Dichlorobenzene	0.61 J	0.54 J	0.87 J	ND	NA	NA	NA	ND	ND	ND	1	6
4-Methyl 2-Pentanone	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	100	ns
Acetone	ND	5.2 J	ND	ND	NA	NA	NA	ND	1.5 J	ND	100	6,000
Benzene	1.2	0.67 J	ND	ND	1.2	1.1	0.98J	ND	ND	ND	1	1
Chlorobenzene	0.62 J	0.74 J	0.78 J	0.99 J	NA	NA	NA	ND	ND	ND	3	50
Chloroethane	ND	0.57 J	ND	ND	ND	ND	ND	ND	ND	ND	10	3,000
Chloromethane	ND	ND	ND	ND	NA	NA	NA	0.40 J	ND	ND	1	3
cis 1,2-dichloroethene	20	23	21	21	17	16	15	ND	ND	ND	5	70
Tetrachloroethene	4.2	3.6	2.9	ND	NA	NA	NA	ND	ND	ND	1	0.7
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	600
Trichloroethene	4.1	3.6	3.3	ND	2.5	2.5	2.8	ND	ND	ND	1	3
Trichlorofluoromethane	2.7	2.3	1.2	ND	NA	NA	NA	ND	ND	ND	1	2,000
Vinyl Chloride	4.8	5.4	5.1	3.5	4	3.5	3.4	ND	ND	ND	1	0.03
Xylenes (total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	500

ND = compound not detected

J = Parameters are estimated values between the detection limit and the NC SWSL.

ns = no corresponding NCAC 2L groundwater quality standard

NC SWSL= North Carolina Solid Waste Section Limit (minimum detection limits)

NCAC 2L std. = 15A North Carolina Administrative Code 2L .0200, Groundwater Quality Standards for Class GA groundwater

Quantities highlighted in orange were detected above the 2L standards

NA = Parameter not analyzed during the specified event

TABLE 10 (Continued)
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED VOLATILE ORGANIC COMPOUNDS
SELECT WELLS LOCATED WITHIN WHITE STREET LANDFILL - PHASE II
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Well ID Date Collected units	AOC II-6							NC SWSL (ug/L)	NCAC 2L Std. (ug/L)
	Sample Locations								
	II-6 4/1/10 (ug/L)	II-6 10/6/10 (ug/L)	II-6 5/9/11 (ug/L)	II-6 10/10/11 (ug/L)	SMW-4 8/2/10 (ug/L)	SMW-4 10/11/10 (ug/L)	SMW-4 10/7/11 (ug/L)		
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	5	6
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	5	7
1,2-Dichlorobenzene	0.43 J	0.51 J	ND	ND	ND	ND	ND	5	20
1,4-Dichlorobenzene	3.4	4.7	ND	4.0	ND	ND	ND	1	6
4-Methyl 2-Pentanone	ND	ND	ND	ND	ND	ND	ND	100	ns
Acetone	5.4 J	ND	ND	ND	ND	ND	ND	100	6,000
Benzene	1.6	2.2	ND	2.4	ND	ND	ND	1	1
Chlorobenzene	4.5	7.4	ND	6.8	ND	ND	ND	3	50
Chloroethane	ND	ND	ND	ND	ND	ND	ND	10	3,000
Chloromethane	ND	ND	ND	ND	ND	ND	ND	1	3
cis 1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	5	70
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	1	0.7
Toluene	ND	ND	ND	ND	ND	ND	ND	1	600
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	1	3
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	1	2,000
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	1	0.03
Xylenes (total)	1.8 J	4.0 J	ND	5.5	ND	ND	ND	5	500

ND = compound not detected

J = Parameters are estimated values between the detection limit and the NC SWSL.

ns = no corresponding NCAC 2L groundwater quality standard

NC SWSL= North Carolina Solid Waste Section Limit (minimum detection limits)

NCAC 2L std. = 15A North Carolina Administrative Code 2L .0200, Groundwater Quality Standards for Class GA groundwater

Quantities highlighted in orange were detected above the 2L standards

TABLE 10 (Continued)
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED VOLATILE ORGANIC COMPOUNDS
SELECT WELLS LOCATED WITHIN WHITE STREET LANDFILL - PHASE II
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Well ID Date Collected units	AOC II-7								NC SWSL (ug/L)	NCAC 2L std (ug/L)
	Sample Locations									
	II-7 4/1/10 (ug/L)	II-7 10/6/10 (ug/L)	II-7 5/9/11 (ug/L)	II-7 10/13/11 (ug/L)	II-7B 4/1/10 (ug/L)	II-7B 10/6/10 (ug/L)	II-7B 5/9/11 (ug/L)	II-7B 10/13/11 (ug/L)		
1,1-Dichloroethane	1.1 J	0.42 J	ND	ND	ND	ND	ND	ND	5	6
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	5	7
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	5	20
1,4-Dichlorobenzene	0.53 J	ND	ND	ND	ND	ND	ND	ND	1	6
4-Methyl 2-Pentanone	ND	ND	ND	ND	ND	ND	ND	ND	100	ns
Acetone	2.0 J	ND	ND	ND	ND	ND	ND	ND	100	6,000
Benzene	0.64 J	ND	ND	ND	ND	ND	ND	ND	1	1
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	3	50
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	10	3,000
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	1	3
cis 1,2-dichloroethene	3.6 J	ND	ND	ND	ND	ND	ND	ND	5	70
Tetrachloroethene	0.56 J	ND	ND	ND	0.57 J	0.57 J	ND	ND	1	0.7
Toluene	1.0	ND	ND	ND	ND	ND	ND	ND	1	600
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	1	3
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	1	2,000
Vinyl Chloride	0.80 J	ND	ND	ND	ND	ND	ND	ND	1	0.03
Xylenes (total)	ND	ND	ND	ND	ND	ND	ND	ND	5	500

ND = compound not detected

J = Parameters are estimated values between the detection limit and the NC SWSL.

ns = no corresponding NCAC 2L groundwater quality standard

NC SWSL= North Carolina Solid Waste Section Limit (minimum detection limits)

NCAC 2L std. = 15A North Carolina Administrative Code 2L .0200, Groundwater Quality Standards for Class GA groundwater

Quantities highlighted in orange were detected above the 2L standards

TABLE 10 (Continued)
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED VOLATILE ORGANIC COMPOUNDS
SELECT WELLS LOCATED WITHIN WHITE STREET LANDFILL - PHASE II
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Well ID Date Collected units	<u>Southern E-Buffer</u>				NC SWSL (ug/L)	NCAC 2L Std (ug/L)
	Sample Locations					
	II-1 4/1/10 (ug/L)	II-1 10/6/10 (ug/L)	II-1 5/9/11 (ug/L)	II-1 10/10/11 (ug/L)		
1,1-Dichloroethane	2.3 J	3.0 J	1.1 J	1.7 J	5	6
1,1-Dichloroethene	ND	ND	ND	ND	5	7
1,2-Dichlorobenzene	ND	0.43 J	ND	ND	5	20
1,4-Dichlorobenzene	6.5	7.5	4.0	7.6	1	6
4-Methyl 2-Pentanone	5.1 J	ND	ND	ND	100	ns
Acetone	ND	ND	ND	ND	100	6,000
Benzene	1.1	1.2	0.78 J	0.98 J	1	1
Chlorobenzene	2.2 J	3.2	1.2 J	4.0	3	50
Chloroethane	0.95 J	1.6 J	ND	ND	10	3,000
Chloromethane	ND	ND	ND	ND	1	3
cis 1,2-dichloroethene	3.3 J	4.2 J	0.88 J	ND	5	70
Tetrachloroethene	ND	ND	ND	ND	1	0.7
Toluene	ND	ND	ND	ND	1	600
Trichloroethene	0.53 J	0.48 J	ND	ND	1	3
Trichlorofluoromethane	ND	ND	ND	ND	1	2,000
Vinyl Chloride	0.90 J	1.4	ND	ND	1	0.03
Xylenes (total)	ND	ND	ND	ND	5	500

ND = compound not detected

J = Parameters are estimated values between the detection limit and the NC SWSL.

ns = no corresponding NCAC 2L groundwater quality standard

NC SWSL = North Carolina Solid Waste Section Limit (minimum detection limits)

NCAC 2L std.=15A North Carolina Administrative Code 2L .0200, Groundwater Quality Standards
for Class GA groundwater

Quantities highlighted in orange were detected above the 2L standards

TABLE 10 (Continued)
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED VOLATILE ORGANIC COMPOUNDS
SELECT WELLS LOCATED WITHIN WHITE STREET LANDFILL - PHASE II
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Well ID Date Collected units	Northern E-Buffer					NC SWSL (ug/L)	NCAC 2L Std. (ug/L)
	Sample Locations						
	II-9 4/29/10 (ug/L)	II-9 10/7/11	SMW-3 8/2/10 (ug/L)	SMW-3 10/11/10 (ug/L)	SMW-3 10/7/11 (ug/L)		
1,1-Dichloroethane	ND	5.8 J	4.2 J	3.8 J	0.88 J	5	6
1,1-Dichloroethene	ND	ND	ND	ND	ND	5	7
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	5	20
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	1	6
4-Methyl 2-Pentanone	ND	ND	ND	ND	ND	100	ns
Acetone	ND	ND	3.0 J	ND	ND	100	6,000
Benzene	ND	ND	ND	ND	ND	1	1
Chlorobenzene	ND	ND	ND	ND	ND	3	50
Chloroethane	ND	ND	ND	ND	ND	10	3,000
Chloromethane	ND	ND	0.44 J	0.61 J	ND	1	3
cis 1,2-dichloroethene	11	16	6.9	7.8	1.2 J	5	70
Tetrachloroethene	ND	ND	ND	ND	ND	1	0.7
Toluene	ND	ND	ND	ND	ND	1	600
Trichloroethene	ND	ND	ND	ND	ND	1	3
Trichlorofluoromethane	ND	ND	ND	ND	ND	1	2,000
Vinyl Chloride	0.66 J	0.69 J	0.49 J	0.68 J	ND	1	0.03
Xylenes (total)	ND	ND	ND	ND	ND	5	500

ND = compound not detected

J = Parameters are estimated values between the detection limit and the NC SWSL

ns = no corresponding NCAC 2L groundwater quality standard

NC SWSL= North Carolina Solid Waste Section Limit (minimum detection limits)

NCAC 2L std. = 15A North Carolina Administrative Code 2L .0200, Groundwater Quality Standards for Class GA groundwater

Quantities highlighted in orange were detected above the 2L standards

TABLE 10 (Continued)
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED VOLATILE ORGANIC COMPOUNDS
SELECT WELLS LOCATED WITHIN WHITE STREET LANDFILL - PHASE II
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Compound	AOC II-3						NC SWSL (ug/L)	NCAC 2L Std. (ug/L)
	II-3 4/30/2010 (ug/L)	II-3 10/8/2010 (ug/L)	II-3 5/1/2011 (ug/L)	II-3 10/7/2011 (ug/L)	II-3B 6/15/11 (ug/L)	II-3B 10/7/2011 (ug/L)		
1,1-Dichloroethane	15	15	14	11	0.95 J	0.88 J	5	6
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	5	7
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5	20
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	1	6
2-Butanone	ND	ND	ND	ND	ND	ND	100	4,000
4-Methyl 2-Pentanone	ND	ND	ND	ND	ND	ND	100	ns
Acetone	ND	ND	ND	ND	4.9 J	ND	100	6,000
Benzene	0.80 J	0.96 J	ND	1.1	ND	ND	1	1
Chlorobenzene	ND	ND	ND	ND	ND	ND	3	50
Chloroethane	1.6 J	1.6 J	ND	ND	0.86 J	ND	10	3,000
cis 1,2-dichloroethene	0.66 J	0.88 J	1.7 J	ND	ND	ND	5	70
Ethylbenzene	ND	ND	ND	ND	ND	ND	1	600
Tetrachloroethene	ND	ND	ND	ND	ND	ND	1	0.7
Toluene	ND	ND	ND	ND	ND	ND	1	600
Trichloroethene	ND	ND	ND	ND	ND	ND	1	3
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	1	2,000
Vinyl Chloride	ND	0.44 J	ND	ND	ND	ND	1	0.03
Xylenes (total)	ND	ND	ND	ND	ND	ND	5	500

ND = compound not detected

J = Parameters are estimated values between the detection limit and the NC SWSL.

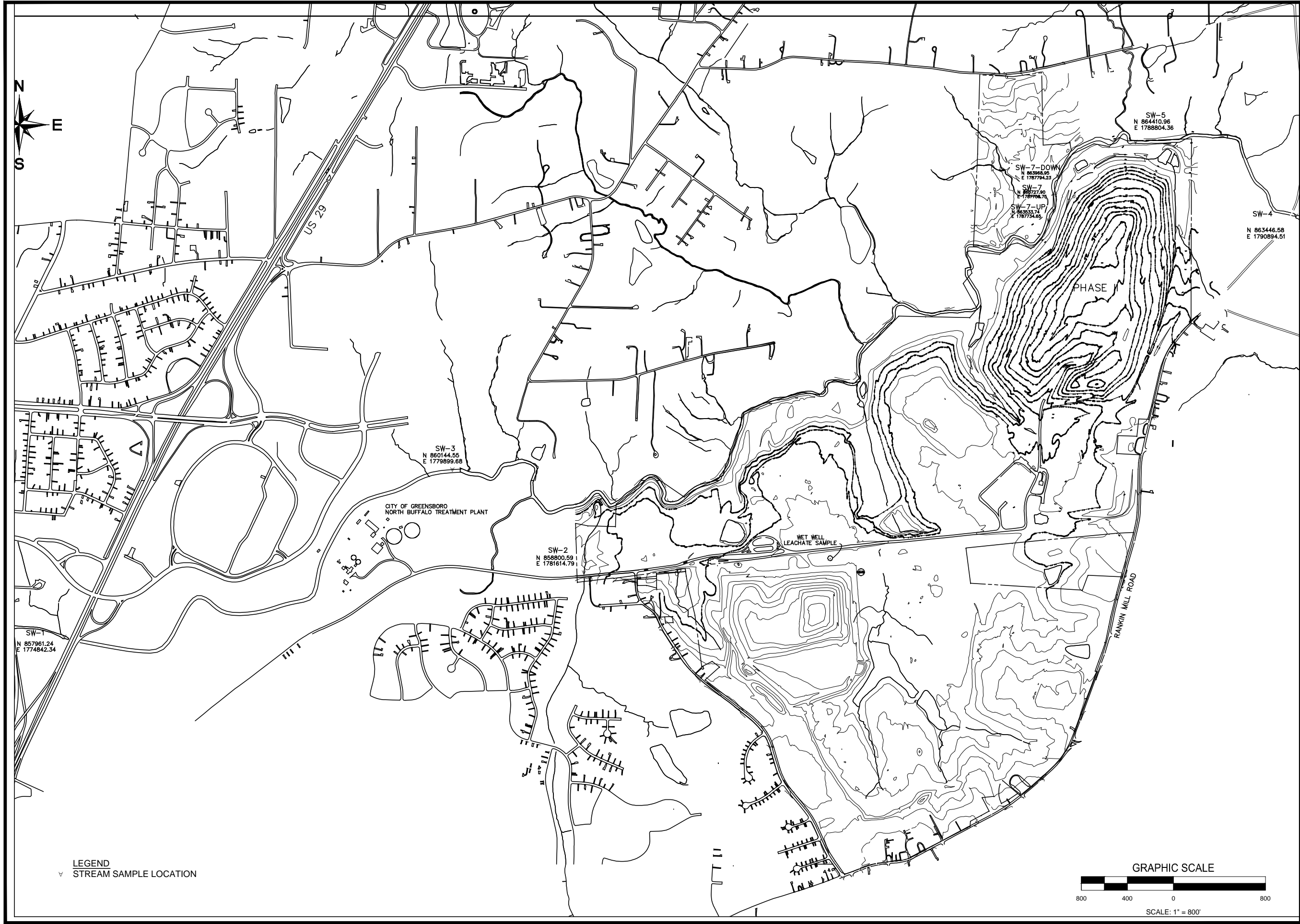
NC SWSL= North Carolina Solid Waste Section Limit

NCAC 2L std. = 15A North Carolina Administrative Code 2L .0200, Groundwater Quality Standards for Class GA groundwater


Quantities highlighted in orange were detected above the 2L standards

NOTE: Prior to 2010 the NCAC 2L standard for 1,1-dichloroethane was 70 ug/L

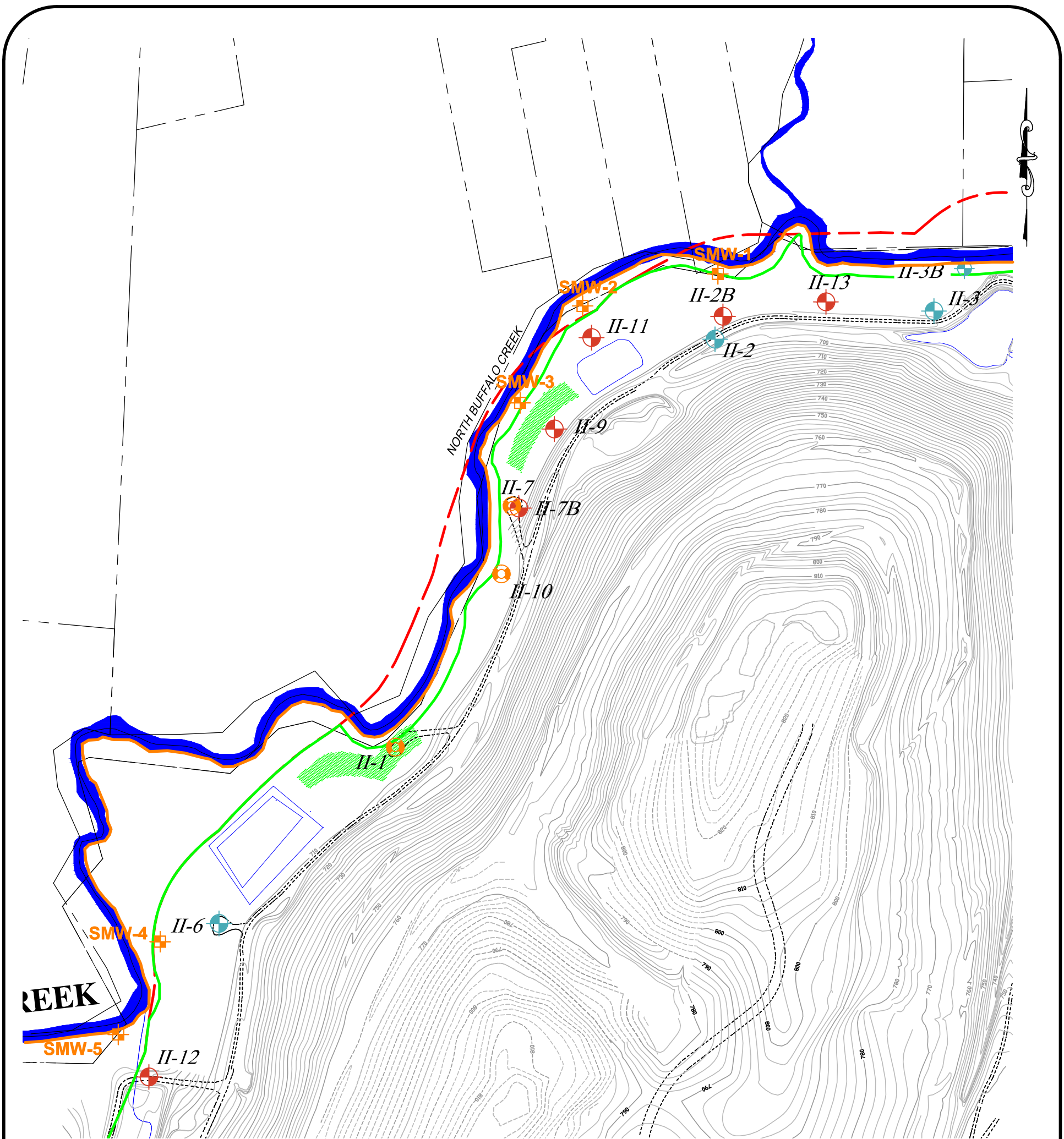
FIGURES



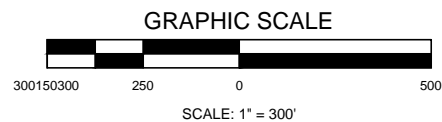
STREAM SAMPLE LOCATION			
PHASE II			
WHITE STREET LANDFILL			
GREENSBORO, NORTH CAROLINA			
SCALE:	AS SHOWN	DRAWN BY:	DSB/RDM
JOB NO.	1584-98-081	DATE:	NOVEMBER 2007
CHECKED BY:			LE
FIGURE NO.			1

**S&ME**

ENVIRONMENTAL SERVICES
ENGINEERING • TESTING



- LEGEND**
- PROPOSED SENTINEL WELL
 - EXISTING SENTINEL WELL
 - PROPOSED PHYTOREMEDIATION BED
 - GROUNDWATER MONITORING WELL
 - CONSTITUENTS DETECTED IN THE DESIGNATED MONITORING WELL
 - FORMER COMPLIANCE BOUNDARY
 - NEW COMPLIANCE BOUNDARY



PROPOSED SENTINEL WELL LOCATION MAP
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA

SCALE: AS SHOWN	DRAWN BY: RDM	CHECKED BY: CDW
JOB NO. 1584-98-081	DATE: FEBRUARY 2012	FIGURE NO. 2

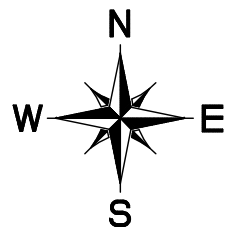


TABLE 1
GROUNDWATER ELEVATION DATA SUMMARY
PHASE II - WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-98-081

Well No.	Type	Elevation TOC (feet)	Depth of Well (feet)	Static Water Levels			
				October 2011		May 2011	
				DTGW (feet)	Elevation (feet)	DTGW (feet)	Elevation (feet)
II-1	Compliance	692.34	26.50	16.86	675.48	15.13	677.21
II-2	Compliance	690.05	32.24	20.23	669.82	19.37	670.68
II-3	Compliance	688.05	32.45	17.51	670.54	16.92	671.13
II-4	Compliance	703.27	28.72	15.96	687.31	10.33	692.94
II-5	Compliance	714.31	15.96	7.18	707.13	6.91	707.40
II-6	Compliance	695.47	20.57	13.10	685.37	10.87	687.50
II-7	Compliance	684.08	27.54	14.02	670.06	13.09	670.39
II-7B	NES	687.21	101.80	17.27	669.94	17.04	670.17
II-8	Compliance	707.09	34.95	9.57	697.52	9.19	697.90
II-9	NES	697.01	25.10	NS	--	NS	--
II-10	NES	703.90	23.40	NS	--	NS	--
II-11	NES	701.77	28.80	NS	--	NS	--
II-12	Compliance	700.97	22.90	10.44	690.53	10.06	690.81
MW-13	Compliance	741.30	33.78	21.58	719.32	18.91	722.39
MW-14	Compliance	785.30	34.28	31.92	733.38	27.13	738.17

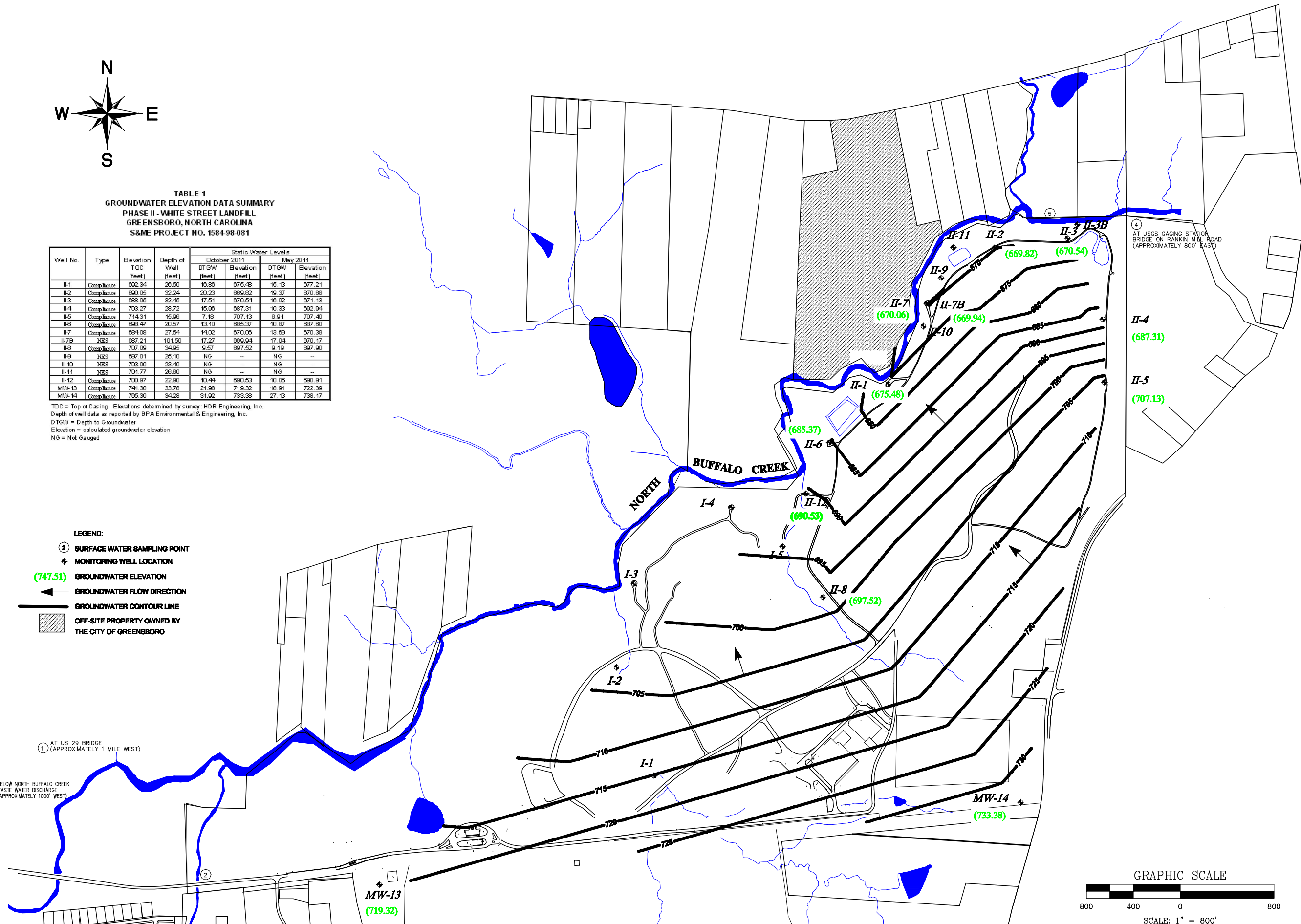
TOC = Top of Casing. Elevations determined by survey: HDR Engineering, Inc.
Depth of well data as reported by BPA Environmental & Engineering, Inc.
DTGW = Depth to Groundwater
Elevation = calculated groundwater elevation
NS = Not Gauged

LEGEND:

- ② SURFACE WATER SAMPLING POINT
- ⊕ MONITORING WELL LOCATION
- (747.51) GROUNDWATER ELEVATION
- GROUNDWATER FLOW DIRECTION
- GROUNDWATER CONTOUR LINE
- OFF-SITE PROPERTY OWNED BY THE CITY OF GREENSBORO

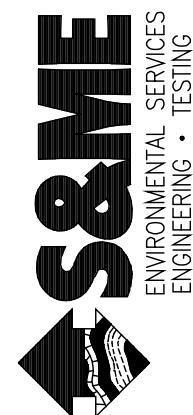
① AT US 29 BRIDGE
(APPROXIMATELY 1 MILE WEST)

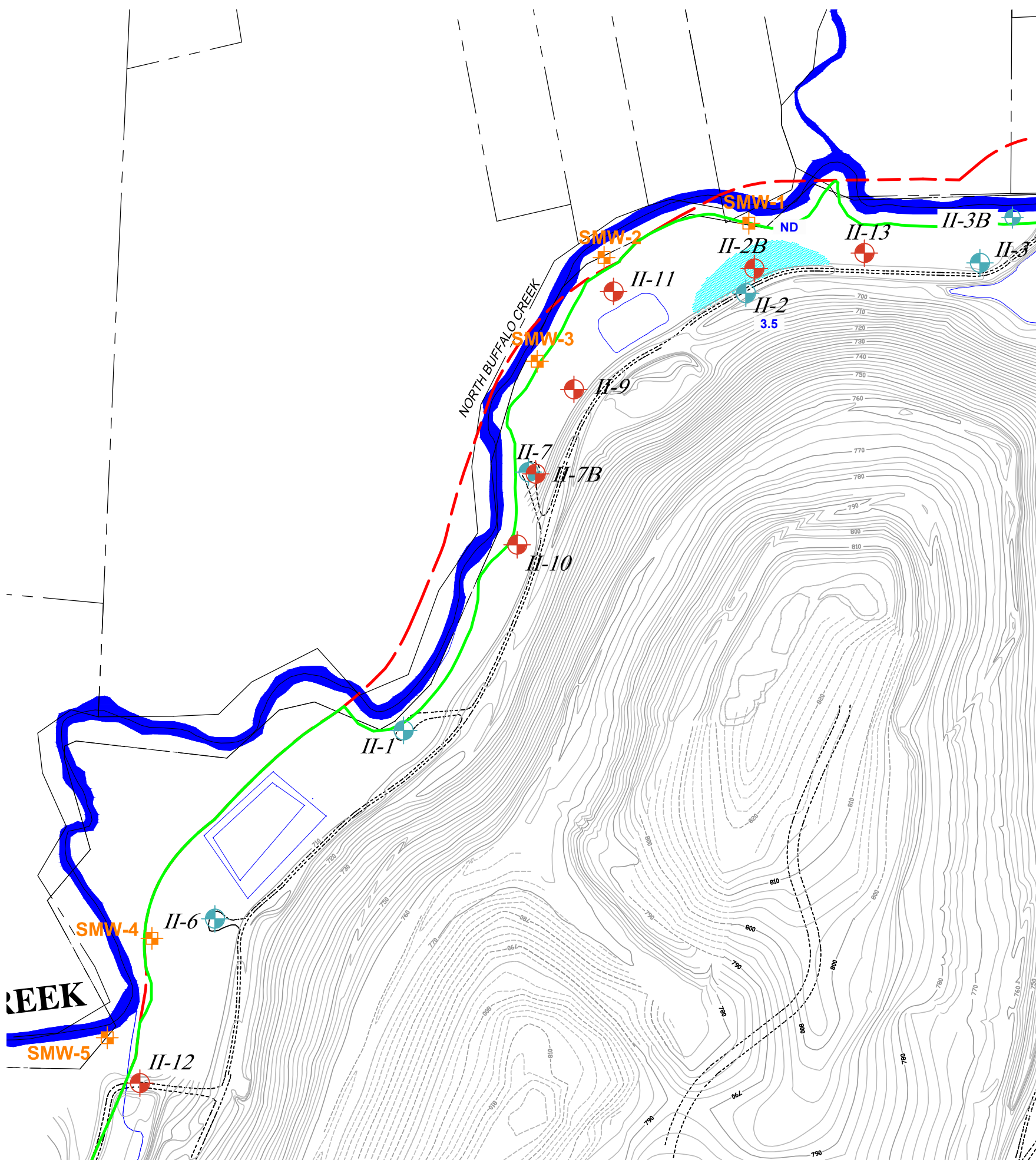
BELOW NORTH BUFFALO CREEK
WASTE WATER DISCHARGE
(APPROXIMATELY 1000' WEST)



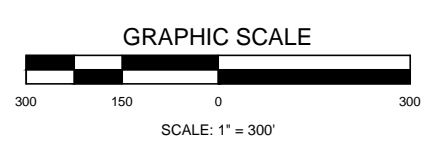
GROUNDWATER FLOW MAP
PHASE II
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA

SCALE: AS SHOWN
JOB NO. 1584-98-081B
DRAWN BY: DSB/RDM
CHECKED BY: SC
DATE: DECEMBER 2011
FIGURE NO. 3



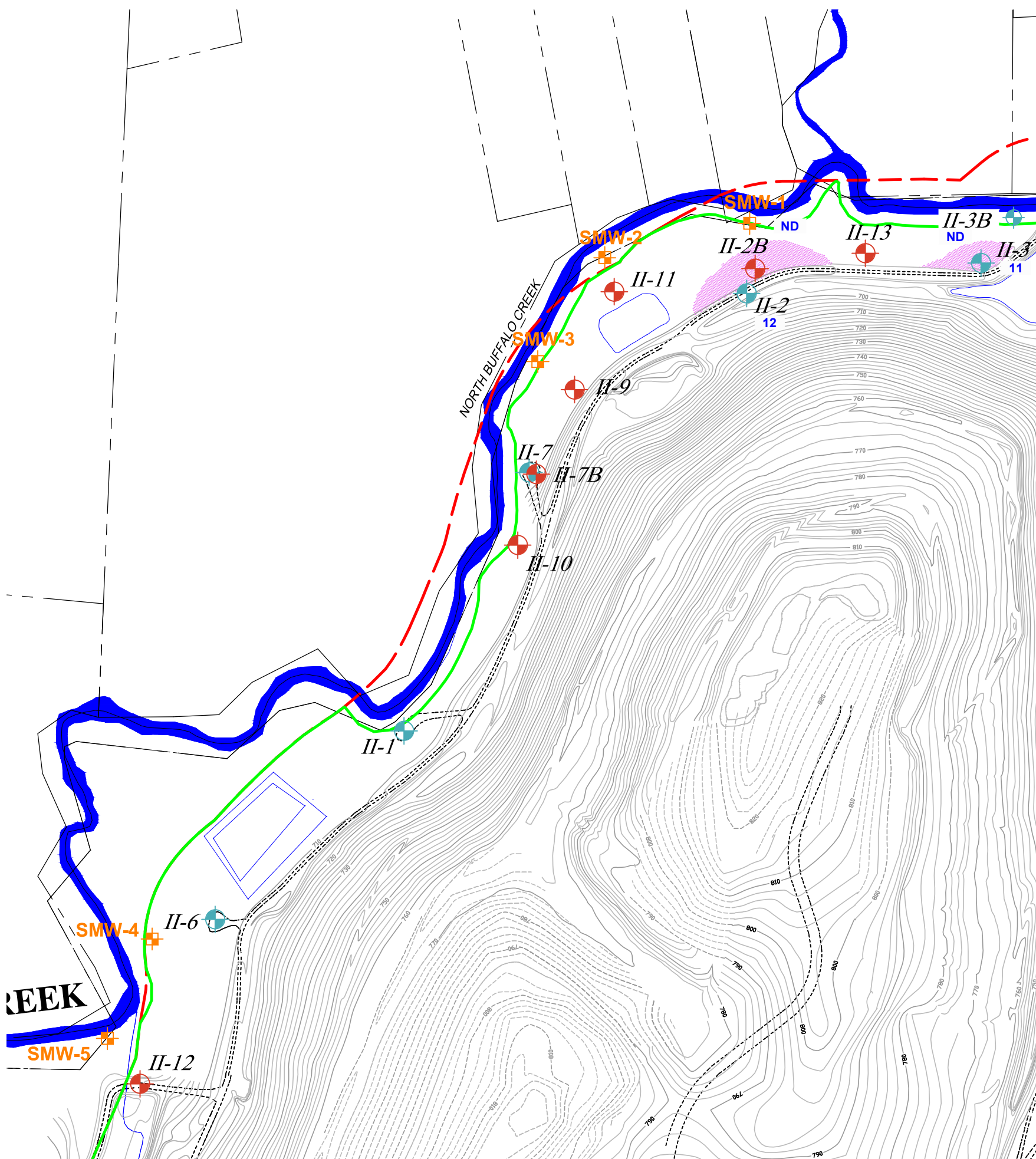


- LEGEND**
- APPROXIMATED EXTENT OF VINYL CHLORIDE COMPOUND PLUME
 - GROUNDWATER MONITORING WELL
 - VINYL CHLORIDE CONCENTRATION DETECTED IN THE DESIGNATED MONITORING WELL
 - FORMER COMPLIANCE BOUNDARY



VINYL CHLORIDE DISTRIBUTION MAP
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA

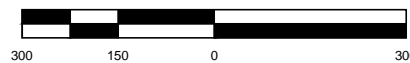
SCALE: AS SHOWN	DRAWN BY: RDM	CHECKED BY: CDW
JOB NO. 1584-98-081	DATE: FEBRUARY 2012	FIGURE NO. 4



LEGEND

- APPROXIMATED EXTENT OF 1,1-DICHLOROETHANE PLUME
- GROUNDWATER MONITORING WELL
- 12 - 1,1-DICHLOROETHANE CONCENTRATION DETECTED IN THE DESIGNATED MONITORING WELL
- FORMER COMPLIANCE BOUNDARY

GRAPHIC SCALE

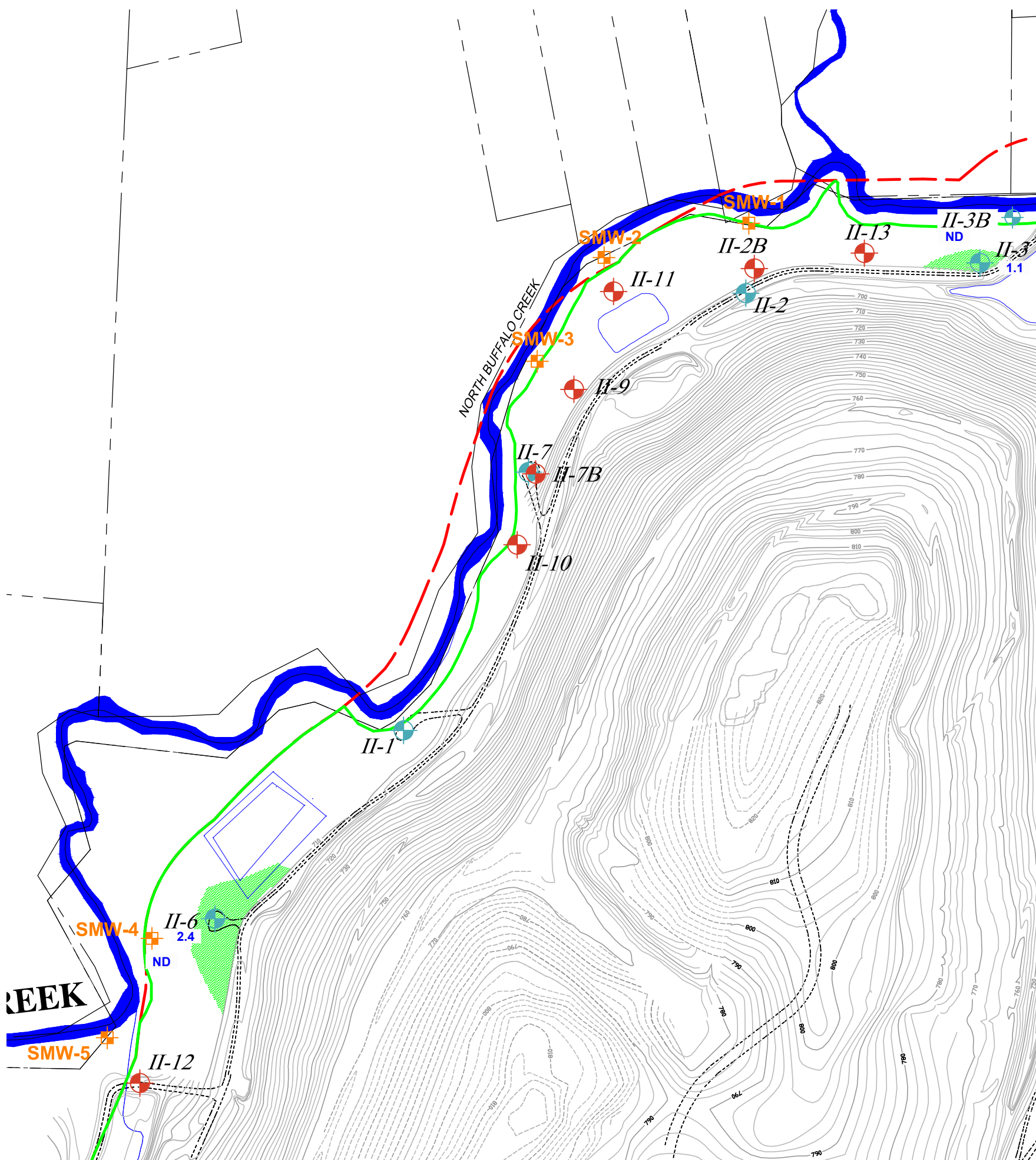


SCALE: 1" = 300'

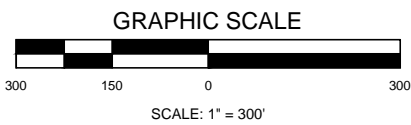


1,1-DICHLOROETHANE DISTRIBUTION MAP
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA

SCALE: AS SHOWN	DRAWN BY: RDM	CHECKED BY: CDW
JOB NO. 1584-98-081	DATE: FEBRUARY 2012	FIGURE NO. 5

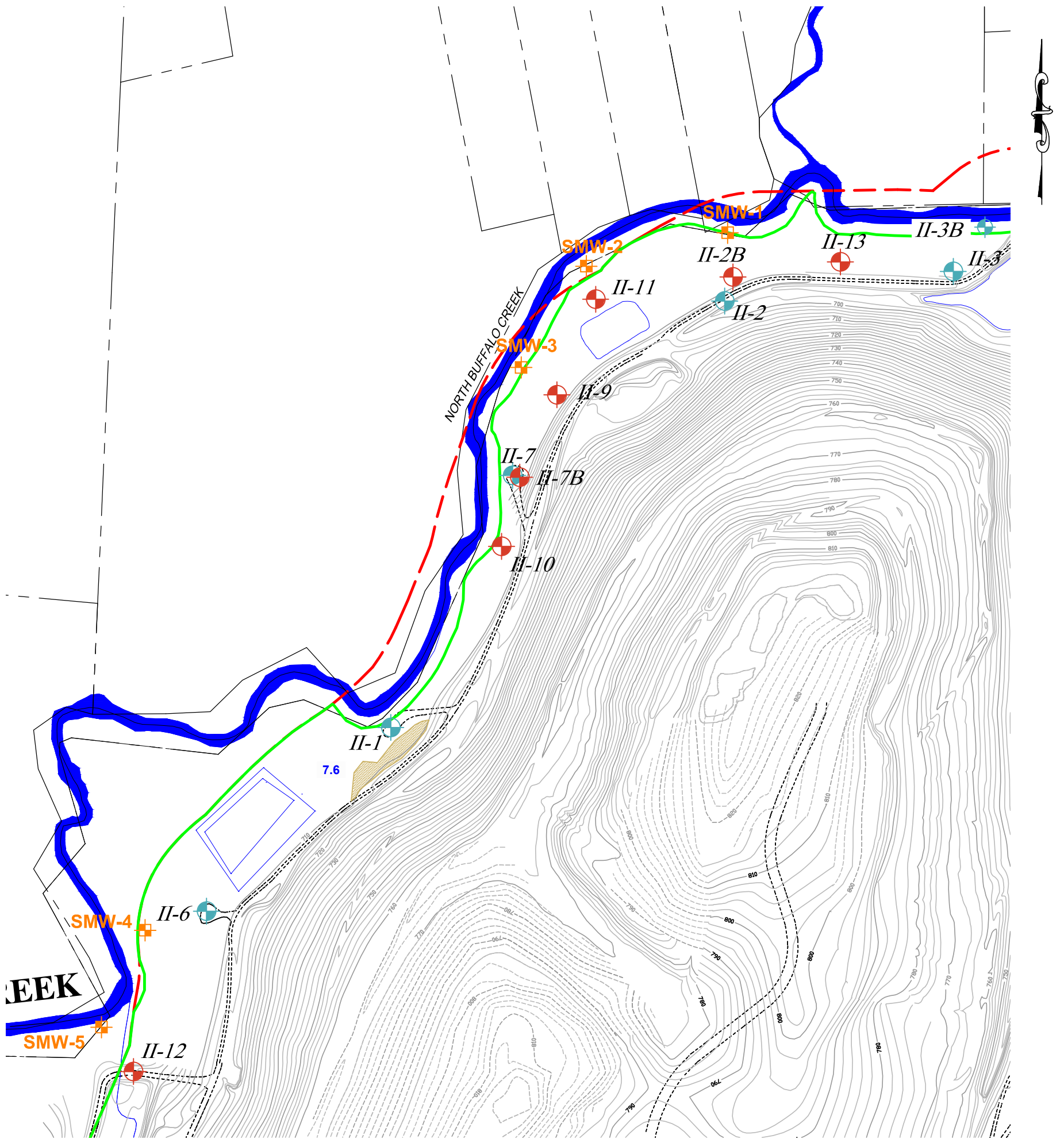


- LEGEND**
- APPROXIMATED EXTENT OF BENZENE PLUME
 - GROUNDWATER MONITORING WELL
 - 12 - BENZENE CONCENTRATION DETECTED IN THE DESIGNATED MONITORING WELL
 - FORMER COMPLIANCE BOUNDARY

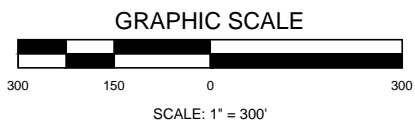


BENZENE DISTRIBUTION MAP
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA

SCALE: AS SHOWN	DRAWN BY: RDM	CHECKED BY: CDW
JOB NO. 1584-98-081	DATE: FEBRUARY 2012	FIGURE NO. 6



- LEGEND**
- APPROXIMATED EXTENT OF 1,4-DICHLOROBENZENE PLUME
 - GROUNDWATER MONITORING WELL
 - 7.6 - 1,4-DICHLOROBENZENE CONCENTRATION DETECTED IN THE DESIGNATED MONITORING WELL
 - FORMER COMPLIANCE BOUNDARY



1,4-DICHLOROBENZENE DISTRIBUTION MAP
WHITE STREET LANDFILL
GREENSBORO, NORTH CAROLINA

SCALE: AS SHOWN	DRAWN BY: RDM	CHECKED BY: CDW
JOB NO. 1584-98-081	DATE: FEBRUARY 2012	FIGURE NO. 7

APPENDIX I

Sentinel Monitoring Wells Lab Reports

Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090

FAX: 919.467.3515



www.encolabs.com

Tuesday, May 20, 2008

S&ME, Inc. (SM004)

Attn: Connel Ware

3718 Old Battleground Rd.

Greensboro, NC 27410

RE: Laboratory Results for

Project Number: [none], Project Name/Desc: White Street Landfill ABP

ENCO Workorder: C804447

Dear Connel Ware,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Tuesday, May 6, 2008.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephanie Franz", with a stylized flourish at the end.

Stephanie Franz

Project Manager

Enclosure(s)

PROJECT NARRATIVE

Date: 20 May 2008
Client: S&ME
Project: White Street Landfill ABP
Lab ID: CB04447

Overview

Environmental Conservation Laboratories, Inc. (ENCO) analyzed all submitted samples in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling by ENCO are discussed in the QC Remarks section below.

Quality Control Samples

Chloride, Nitrite, and Nitrate/Nitrite (NO_x) were detected in the associated Method Blanks at low-level concentrations (less than half of the MRL). Associated samples with concentrations of these analytes less than ten times that of the detections in the Method Blanks should be considered to have a possible high bias.

Quality Control Remarks

The spike recoveries of Chloride, Sulfate, and TOC in the MS and/or MSD samples were outside of control limits. The QC batches were approved based on acceptable LCS recoveries of these analytes.

The determination of Ferrous Iron is considered by the EPA to be a field parameter, and as such, has a hold time of 0.01 days (14.4 minutes). As the samples were expired prior to receipt by ENCO, the analyses were performed on the out of hold samples, and the results are appropriately qualified (Q-flagged).

Other Comments

The analytical data presented in this report are consistent with the methods as referenced in the analytical report. Any exceptions or deviations are noted in the QC remarks section of this narrative or in the Flags/Notes and Definitions section of the report.

Released By:
Environmental Conservation Laboratories, Inc.

Stephanie Franz
Project Manager

SAMPLE SUMMARY/LABORATORY CHRONICLE

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analyte Date/Time(s)
EPA 300.0	06/02/08	05/09/08 14:22	5/10/2008 09:15
EPA 353.2	05/07/08 07:50	05/06/08 13:15	5/6/2008 15:40
EPA 353.2	06/02/08	05/13/08 09:00	5/13/2008 12:00
EPA 353.2	06/02/08	05/19/08 10:53	5/19/2008 10:53
EPA 376.2	05/12/08	05/09/08 08:44	5/9/2008 08:44
EPA 415.1	06/02/08	05/07/08 10:35	5/7/2008 12:28
RSK 175	05/19/08	05/08/08 07:48	5/8/2008 13:25
SM18 3500-Fe D	05/05/08 08:04	05/07/08 16:23	5/7/2008 16:23
SM1500-Cl/E	06/02/08	05/19/08 07:54	5/19/2008 10:35

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analyte Date/Time(s)
EPA 300.0	06/02/08	05/09/08 14:22	5/10/2008 09:45
EPA 353.2	05/07/08 11:10	05/06/08 13:15	5/6/2008 15:44
EPA 353.2	06/02/08	05/13/08 09:00	5/13/2008 12:05
EPA 353.2	06/02/08	05/19/08 10:53	5/19/2008 10:53
EPA 376.2	05/12/08	05/09/08 08:44	5/9/2008 08:44
EPA 415.1	06/02/08	05/07/08 10:35	5/7/2008 12:28
RSK 175	05/19/08	05/08/08 07:48	5/8/2008 13:34
SM18 3500-Fe D	05/05/08 11:24	05/07/08 16:23	5/7/2008 16:23

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analyte Date/Time(s)
EPA 300.0	06/02/08	05/09/08 14:22	5/10/2008 10:15
EPA 353.2	05/07/08 12:30	05/06/08 13:15	5/6/2008 15:45
EPA 353.2	06/02/08	05/13/08 09:00	5/13/2008 12:06
EPA 353.2	06/02/08	05/19/08 10:53	5/19/2008 10:53
EPA 376.2	05/12/08	05/09/08 08:44	5/9/2008 08:44
EPA 415.1	06/02/08	05/07/08 10:35	5/7/2008 12:28
RSK 175	05/19/08	05/08/08 07:48	5/8/2008 13:43
SM18 3500-Fe D	05/05/08 12:44	05/07/08 16:23	5/7/2008 16:23

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analyte Date/Time(s)
EPA 300.0	06/02/08	05/09/08 14:22	5/10/2008 11:44
EPA 353.2	05/07/08 09:10	05/06/08 13:15	5/6/2008 15:46
EPA 353.2	06/02/08	05/13/08 09:00	5/13/2008 12:07
EPA 353.2	06/02/08	05/19/08 10:53	5/19/2008 10:53
EPA 376.2	05/12/08	05/09/08 08:44	5/9/2008 08:44
EPA 415.1	06/02/08	05/07/08 10:35	5/7/2008 12:28
RSK 175	05/19/08	05/08/08 07:48	5/8/2008 13:52
SM18 3500-Fe D	05/05/08 09:24	05/07/08 16:23	5/7/2008 16:23

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	06/02/08	05/09/08 14:22	5/10/2008 12:13
EPA 353.2	05/07/08 10:00	05/06/08 13:15	5/6/2008 15:47
EPA 353.2	06/02/08	05/13/08 09:00	5/13/2008 12:08
EPA 353.2	06/02/08	05/19/08 10:53	5/19/2008 10:53
EPA 376.2	05/12/08	05/09/08 08:44	5/9/2008 08:44
EPA 415.1	06/02/08	05/07/08 10:35	5/7/2008 12:28
RSK 175	05/19/08	05/08/08 07:48	5/8/2008 14:08
SM18 3500-Fe D	05/05/08 10:14	05/07/08 16:23	5/7/2008 16:23

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	06/02/08	05/09/08 14:22	5/10/2008 13:03
EPA 353.2	05/07/08 15:00	05/06/08 13:15	5/6/2008 15:48
EPA 353.2	06/02/08	05/13/08 09:00	5/13/2008 12:08
EPA 353.2	06/02/08	05/19/08 10:53	5/19/2008 10:53
EPA 376.2	05/12/08	05/09/08 08:44	5/9/2008 08:44
EPA 415.1	06/02/08	05/07/08 10:35	5/7/2008 12:28
RSK 175	05/19/08	05/08/08 07:48	5/8/2008 16:07
SM18 3500-Fe D	05/05/08 15:14	05/07/08 16:23	5/7/2008 16:23

NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	450	BD	5	2.4	25	NE	mg/L	SM4500-Cl/E	QB-01
Nitrite as N	0.015	JB	1	0.010	0.10	1	mg/L	EPA 353.2	J-01
Sulfate as SO4	25	J	1	0.25	5.0	250	mg/L	EPA 300.0	
Sulfate as SO4	25	J	1	0.25	5.0	250	mg/L	EPA 300.0	
Total Organic Carbon	15		1	0.32	1.0	NE	mg/L	EPA 415.1	

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	12		1	0.25	5.0	NE	mg/L	EPA 300.0	
Nitrite as N	0.013	JB	1	0.010	0.10	1	mg/L	EPA 353.2	J-01
Sulfate as SO4	25	J	1	0.25	5.0	250	mg/L	EPA 300.0	
Sulfate as SO4	25	J	1	0.25	5.0	250	mg/L	EPA 300.0	
Total Organic Carbon	2.2		1	0.32	1.0	NE	mg/L	EPA 415.1	

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	11		1	0.25	5.0	NE	mg/L	EPA 300.0	
Sulfate as SO4	25	J	1	0.25	5.0	250	mg/L	EPA 300.0	
Sulfate as SO4	25	J	1	0.25	5.0	250	mg/L	EPA 300.0	
Total Organic Carbon	3.3		1	0.32	1.0	NE	mg/L	EPA 415.1	

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	4.3	J	1	0.25	5.0	NE	mg/L	EPA 300.0	
Nitrate as N	2.2	J	1	0.010	0.10	10	mg/L	EPA 353.2	
Nitrate/Nitrite as N	2.2	B	1	0.022	0.10	NE	mg/L	EPA 353.2	QB-01
Sulfate as SO4	4.7	J	1	0.25	5.0	250	mg/L	EPA 300.0	
Sulfate as SO4	4.7	J	1	0.25	5.0	250	mg/L	EPA 300.0	
Total Organic Carbon	1.3		1	0.32	1.0	NE	mg/L	EPA 415.1	

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	4.8	J	1	0.25	5.0	NE	mg/L	EPA 300.0	
Nitrate/Nitrite as N	0.023	JB	1	0.022	0.10	NE	mg/L	EPA 353.2	J-01
Nitrite as N	0.20	JB	1	0.010	0.10	1	mg/L	EPA 353.2	QB-01
Total Organic Carbon	3.1		1	0.32	1.0	NE	mg/L	EPA 415.1	

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	6.0		1	0.25	5.0	NE	mg/L	EPA 300.0	
Nitrate as N	0.39	J	1	0.010	0.10	10	mg/L	EPA 353.2	
Nitrate/Nitrite as N	0.41	B	1	0.022	0.10	NE	mg/L	EPA 353.2	QB-01
Nitrite as N	0.018	JB	1	0.010	0.10	1	mg/L	EPA 353.2	J-01
Sulfate as SO4	40	J	1	0.25	5.0	250	mg/L	EPA 300.0	
Sulfate as SO4	40	J	1	0.25	5.0	250	mg/L	EPA 300.0	
Total Organic Carbon	9.2		1	0.32	1.0	NE	mg/L	EPA 415.1	

ANALYTICAL RESULTS

Description: II-1
Matrix: Ground Water
Project: White Street Landfill ABP

Lab Sample ID: CB04447-01
Sampled: 05/05/08 07:50
Sampled By: Gary Simcox

Received: 05/06/08 08:30
Work Order: CB04447

Classical Chemistry Parameters

^ - ENCO Cary certified analyte (NC 591)

Analyte [CAS Number]	Results	Flag	Units	DE	MDL	MRL	MC RWEL	Method	Analyzed	Rx	Notes
Chloride [16887-00-6] ^	488	BD	mg/L	5	2.4	25	NE	SM4500-Cl/E	05/19/08 10:35	PEV	QS-01
Nitrate as N [14797-55-8] ^	0.010	U	mg/L	1	0.010	0.10	10	EPA 353.2	05/19/08 10:53	PEV	
Nitrate/Nitrite as N [NA] ^	0.022	U	mg/L	1	0.022	0.10	NE	EPA 353.2	05/13/08 12:00	PEV	
Nitrite as N [14797-65-8] ^	0.015	JB	mg/L	1	0.010	0.10	1	EPA 353.2	05/06/08 15:40	PEV	J-01
Sulfate as SO4 [14808-79-8]	25	J	mg/L	1	0.25	5.0	250	EPA 308.0	05/10/08 09:15	AJ	
Sulfide [10496-25-8]	0.10	U	mg/L	1	0.10	0.10	1	EPA 376.2	05/09/08 08:44	GPW	



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Description: II-1

Matrix: Ground Water

Project: White Street Landfill ABP

Lab Sample ID: C804447-01

Sampled: 05/05/08 07:50

Sampled By: Gary Simcox

Received: 05/06/08 08:30

Work Order: C804447

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	MC/MDL	Method	Acquired	Rx	Notes
Iron, Ferrous [NA]	0.042	U	mg/L	1	0.042	0.050		SM18 3500-Fe D	05/07/08 16:23	dps	Q
Total Organic Carbon [NA]	1.5		mg/L	1	0.32	1.0	NE	EPA 415.1	05/07/08 12:28	DPS	



Description: II-1
Matrix: Ground Water
Project: White Street Landfill ABP

Lab Sample ID: CB04447-01
Sampled: 05/05/08 07:50
Sampled By: Gary Simcox

Received: 05/06/08 08:30
Work Order: CB04447

Dissolved Gases by GC

Analyte [CAS Number]	Result	Unit	DF	MDL	MR1	NC SWSL	Method	Analyzed	By	Notes
Methane	0.135	mg/L	1	0.0004	0.001		RSK 175	05/08/08 13:25	MYE	

Description: II-2
Matrix: Ground Water
Project: White Street Landfill ABP

Lab Sample ID: C804447-02
Sampled: 05/05/08 11:10
Sampled By: Gary Simcox

Received: 05/06/08 08:30
Work Order: C804447

Classical Chemistry Parameters

^ - ENCO Cary certified analyte (NC 591)

Analyte [CAS Number]	Results	Flag	Units	RF	MDL	MRL	NC SWEL	Method	Analyzed	By	Notes
Chloride [16887-00-6]	12		mg/L	1	0.25	5.0	NE	EPA 300.0	05/10/08 09:45	AJ	
Nitrate as N [14797-55-8] ^	0.010	U	mg/L	1	0.010	0.10	10	EPA 353.2	05/10/08 10:53	PEV	
Nitrate/Nitrite as N [NA] ^	0.022	U	mg/L	1	0.022	0.10	NE	EPA 353.2	05/13/08 12:05	PEV	
Nitrite as N [14797-65-8] ^	0.013	JB	mg/L	1	0.010	0.10	1	EPA 353.2	05/06/08 15:44	PEV	3-01
Sulfate as SO4 [14808-79-8]	25	J	mg/L	1	0.25	5.0	250	EPA 300.0	05/10/08 09:45	AJ	
Sulfide [10496-25-8]	0.10	U	mg/L	1	0.10	0.10	1	EPA 376.2	05/09/08 08:44	GPW	



Description: II-2
Matrix: Ground Water
Project: White Street Landfill ABP

Lab Sample ID: C804447-02
Sampled: 05/05/08 11:10
Sampled By: Gary Simcox

Received: 05/06/08 08:30
Work Order: C804447

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MDL	NC SWM	Method	Analyzed	By	Notes
Iron, Ferrous [NA]	0.042	U	mg/L	1	0.042	0.050		SM18 3900-Fe D	05/07/08 16:23	dps	Q
Total Organic Carbon [NA]	2.2		mg/L	1	0.32	1.0	NE	EPA 415.1	05/07/08 12:28	DPS	



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Description: II-2

Matrix: Ground Water

Project: White Street Landfill ABP

Lab Sample ID: C004447-02

Sampled: 05/05/08 11:10

Sampled By: Gary Simcox

Received: 05/06/08 08:30

Work Order: C004447

Dissolved Gases by GC

Analyte [CAS Number]	Results	Pin	Units	DF	MDL	MRL	NC SWSL	Method	Acquired	Rx	Notes
Methane	3.49		mg/L	1	0.0004	0.001		RSK 175	05/06/08 13:34	MYE	

Description: II-28
Matrix: Ground Water
Project: White Street Landfill ABP

Lab Sample ID: C804447-03
Sampled: 05/05/08 12:30
Sampled By: Gary Simcox

Received: 05/06/08 08:30
Work Order: C804447

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	MC SWEL	Method	Analyzed	By	Notes
Chloride [16763-00-6]	11		mg/L	1	0.25	5.0	NE	EPA 300.0	05/10/08 10:15	AJ	
Nitrate as N [14797-55-8] ^	0.010	U	mg/L	1	0.010	0.10	10	EPA 353.2	05/19/08 10:53	PEV	
Nitrate/Nitrite as N [NA] ^	0.022	U	mg/L	1	0.022	0.10	NE	EPA 353.2	05/13/08 12:06	PEV	
Nitrite as N [14797-65-8] ^	0.010	U	mg/L	1	0.010	0.10	1	EPA 353.2	05/06/08 15:45	PEV	
Sulfate as SO4 [14808-79-8]	25	J	mg/L	1	0.25	5.0	250	EPA 300.0	05/10/08 10:15	AJ	
Sulfide [10496-25-8]	0.10	U	mg/L	1	0.10	0.10	1	EPA 376.2	05/09/08 08:44	GPW	



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Description: II-28

Matrix: Ground Water

Project: White Street Landfill ABP

Lab Sample ID: C804447-03

Sampled: 05/05/08 12:30

Sampled By: Gary Simcox

Received: 05/06/08 08:30

Work Order: C804447

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	MC SWSL	Method	Analyzed	By	Notes
Iron, Ferrous [NA]	1.7		mg/L	1	0.042	0.050		SM18 3500-Fe D	05/07/08 16:23	dps	Q
Total Organic Carbon [NA]	3.3		mg/L	1	0.32	1.0	NE	EPA 415.1	05/07/08 12:28	DPS	



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Description: II-2B

Matrix: Ground Water

Project: White Street Landfill ABP

Lab Sample ID: CB04447-03

Sampled: 05/05/08 12:30

Sampled By: Gary Simcox

Received: 05/06/08 08:30

Work Order: CB04447

Dissolved Gases by GC

Analyte [CAS Number]	Result	Flag	Units	DF	MDL	MRL	MC/MSDL	Method	Analyzed	By	Notes
Methane	2.33		mg/L	1	0.0004	0.001		RSK 175	05/06/08 13:43	MYE	

Description: II-7
Matrix: Ground Water
Project: White Street Landfill ABP

Lab Sample ID: CB04447-04
Sampled: 05/05/08 09:10
Sampled By: Gary Simcox

Received: 05/06/08 08:30
Work Order: CB04447

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC.MDL	Method	Analyzed	By	Notes
Chloride [16887-00-0]	4.3	J	mg/L	1	0.25	5.0	NE	EPA 300.0	05/10/08 11:44	AJ	
Nitrate as N [14797-55-8] ^	2.2	J	mg/L	1	0.010	0.10	10	EPA 353.2	05/19/08 10:53	PEV	
Nitrate/Nitrite as N [NA] ^	2.2	B	mg/L	1	0.022	0.10	NE	EPA 353.2	05/13/08 12:07	PEV	QB-01
Nitrite as N [14797-45-0] ^	0.010	U	mg/L	1	0.010	0.10	1	EPA 353.2	05/06/08 15:46	PEV	
Sulfate as SO4 [14808-79-8]	4.7	J	mg/L	1	0.25	5.0	250	EPA 300.0	05/10/08 11:44	AJ	
Sulfide [18496-25-0]	0.10	U	mg/L	1	0.10	0.10	1	EPA 376.2	05/09/08 06:44	GPW	



Description: II-7
Matrix: Ground Water
Project: White Street Landfill ABP

Lab Sample ID: C804447-04
Sampled: 05/05/08 09:10
Sampled By: Gary Simcox

Received: 05/06/08 08:30
Work Order: C804447

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MR1	MC/SMCL	Method	Analyzed	By	Notes
Iron, Ferrous [NA]	0.042	U	mg/L	1	0.042	0.050		SM18 3900-Fe D	05/07/08 16:23	dps	Q
Total Organic Carbon [NA]	1.3		mg/L	1	0.32	1.0	NE	EPA 415.1	05/07/08 12:28	DPS	



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Description: II-7

Matrix: Ground Water

Project: White Street Landfill ABP

Lab Sample ID: C804447-04

Sampled: 05/05/08 09:10

Sampled By: Gary Simcox

Received: 05/06/08 08:30

Work Order: C804447

Dissolved Gases by GC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analized</u>	<u>By</u>	<u>Notes</u>
Methane	0.000		mg/L	1	0.0004	0.001		RSK 175	05/06/08 13:52	MYE	

Description: II-7B
Matrix: Ground Water
Project: White Street Landfill ABP

Lab Sample ID: C804447-05
Sampled: 05/05/08 10:00
Sampled By: Gary Simcox

Received: 05/06/08 08:30
Work Order: C804447

Classical Chemistry Parameters

^ - ENCO Cary certified analyte (NC 591)

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Acquired	By	Notes
Chloride [16887-00-6]	4.8	J	mg/L	1	0.25	5.0	NE	EPA 300.0	05/10/08 12:13	AJ	
Nitrate as N [14797-55-8] ^	0.010	U	mg/L	1	0.010	0.10	10	EPA 353.2	05/19/08 10:53	PEV	
Nitrate/Nitrite as N [NA] ^	0.023	JB	mg/L	1	0.022	0.10	NE	EPA 353.2	05/13/08 12:08	PEV	J-01
Nitrite as N [14797-65-8] ^	0.20	JB	mg/L	1	0.010	0.10	1	EPA 353.2	05/06/08 15:47	PEV	QB-01
Sulfide [10496-25-8]	0.10	U	mg/L	1	0.10	0.10	1	EPA 376.2	05/09/08 08:44	GPW	



Description: II-7B
Matrix: Ground Water
Project: White Street Landfill ABP

Lab Sample ID: CB04447-05
Sampled: 05/05/08 10:00
Sampled By: Gary Simcox

Received: 05/06/08 08:30
Work Order: CB04447

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	MC/MSL	Method	Acquired	Rx	Notes
Iron, Ferrous [NA]	0.042	U	mg/L	1	0.042	0.050		SM18 3500-Fe D	05/07/08 16:23	dps	Q
Total Organic Carbon [NA]	3.1		mg/L	1	0.32	1.0	NE	EPA 415.1	05/07/08 12:28	DPS	



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Description: II-7B

Matrix: Ground Water

Project: White Street Landfill ABP

Lab Sample ID: CB04447-05

Sampled: 05/05/08 10:00

Sampled By: Gary Simcox

Received: 05/06/08 08:30

Work Order: CB04447

Dissolved Gases by GC

Analyte [CAS Number]	Result	Flag	Units	DF	MDL	MBL	NC SWSL	Method	Analyst	By	Notes
Methane	0.003		mg/L	1	0.0004	0.001		RSK 175	05/06/08 14:08	MYE	



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Description: II-9

Matrix: Ground Water

Project: White Street Landfill ABP

Lab Sample ID: C804447-06

Sampled: 05/05/08 15:00

Sampled By: Gary Simcox

Received: 05/06/08 08:30

Work Order: C804447

Classical Chemistry Parameters

^ - ENCO Cary certified analyte (NC 591)

Analyte [CAS Number]	Results	Flag	Units	DE	MDL	MDL	MC RWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6]	6.8		mg/L	1	0.25	5.0	NE	EPA 308.0	05/10/08 13:03	AJ	
Nitrate as N [14797-55-8] ^	0.39	J	mg/L	1	0.010	0.10	10	EPA 353.2	05/10/08 10:53	PEV	
Nitrate/Nitrite as N [NA] ^	0.41	B	mg/L	1	0.022	0.10	NE	EPA 353.2	05/11/08 12:08	PEV	QB-01
Nitrite as N [14797-65-8] ^	0.018	JB	mg/L	1	0.010	0.10	1	EPA 353.2	05/06/08 15:48	PEV	J-01
Sulfate as SO4 [14808-79-8]	40	J	mg/L	1	0.25	5.0	250	EPA 308.0	05/10/08 13:03	AJ	
Sulfide [10496-25-8]	0.10	U	mg/L	1	0.10	0.10	1	EPA 376.2	05/09/08 08:44	GPW	



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Description: II-9

Matrix: Ground Water

Project: White Street Landfill ABP

Lab Sample ID: C804447-06

Sampled: 05/05/08 15:00

Sampled By: Gary Simcox

Received: 05/06/08 08:30

Work Order: C804447

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DP	MDL	MRL	MC/MSL	Method	Analyzed	By	Notes
Iron, Ferrous [NA]	0.042	U	mg/L	1	0.042	0.050		SM18 3500-Fe D	05/07/08 16:23	dps	Q
Total Organic Carbon [NA]	9.2		mg/L	1	0.32	1.0	NE	EPA 415.1	05/07/08 12:28	DPS	



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Description: II-9

Matrix: Ground Water

Project: White Street Landfill ABP

Lab Sample ID: C804447-06

Sampled: 05/05/08 15:00

Sampled By: Gary Simcox

Received: 05/06/08 08:30

Work Order: C804447

Dissolved Gases by GC

<u>Analyte (CAS Number)</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MBL</u>	<u>MC EWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Methane	0.002		mg/L	1	0.0004	0.001		RSK 175	05/06/08 16:07	MYE	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch SED0023 - NO PREP

Blank (8806023-BLK1)

Prepared: 05/06/2008 13:15 Analyzed: 05/06/2008 15:37



LCS (8806023-BL1)

Prepared: 05/06/2008 13:15 Analyzed: 05/06/2008 15:39



Matrix Spike (8806023-M51)

Prepared: 05/06/2008 13:15 Analyzed: 05/06/2008 15:41

Source: C804447-01



Matrix Spike Dup (8806023-M5D1)

Prepared: 05/06/2008 13:15 Analyzed: 05/06/2008 15:42

Source: C804447-01



Batch SED0002 - NO PREP

Blank (8809002-BLK1)

Prepared & Analyzed: 05/09/2008 08:44



LCS (8809002-BL1)

Prepared & Analyzed: 05/09/2008 08:44



Matrix Spike (8809002-M51)

Prepared & Analyzed: 05/09/2008 08:44

Source: C801910-01



Matrix Spike Dup (8809002-M5D1)

Prepared & Analyzed: 05/09/2008 08:44

Source: C801910-01



Batch SED0018 - NO PREP

Blank (8809018-BLK1)

Prepared: 05/09/2008 14:22 Analyzed: 05/09/2008 23:22

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 8809018 - NO PREP

Blank (8809018-BLK1) Continued

Prepared: 05/09/2008 14:22 Analyzed: 05/09/2008 23:22

Chloride	0.25	U	5.0	mg/L							
Sulfate as SO ₄	0.25	U	5.0	mg/L							

LCS (8809018-BL1)

Prepared: 05/09/2008 14:22 Analyzed: 05/10/2008 00:21

Chloride	53		5.0	mg/L	50.0		107	90-110			
Sulfate as SO ₄	46		5.0	mg/L	50.0		93	90-110			

Matrix Spike (8809018-MS1)

Prepared: 05/09/2008 14:22 Analyzed: 05/10/2008 01:21

Source: C801910-01

Chloride	60		5.0	mg/L	50.0	2.8	113	90-110			QM-13
Sulfate as SO ₄	48		5.0	mg/L	50.0	8.0	81	90-110			QM-13

Matrix Spike Dup (8809018-MSD1)

Prepared: 05/09/2008 14:22 Analyzed: 05/10/2008 01:50

Source: C801910-01

Chloride	61		5.0	mg/L	50.0	2.8	114	90-110	2	10	QM-13
Sulfate as SO ₄	50		5.0	mg/L	50.0	8.0	84	90-110	3	10	QM-13

Batch 8811003 - NO PREP

Blank (8811003-BLK1)

Prepared: 05/13/2008 09:00 Analyzed: 05/13/2008 11:28

Nitrate/Nitrite as N	0.032	J	0.10	mg/L							
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LCS (8811003-BL1)

Prepared: 05/13/2008 09:00 Analyzed: 05/13/2008 11:31

Nitrate/Nitrite as N	1.2	8	0.10	mg/L	1.25		95	80-120			
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Matrix Spike (8811003-MS1)

Prepared: 05/13/2008 09:00 Analyzed: 05/13/2008 11:35

Source: C802021-01

Nitrate/Nitrite as N	1.3	8	0.10	mg/L	1.28	0.004	96	80-120			
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Matrix Spike Dup (8811003-MSD1)

Prepared: 05/13/2008 09:00 Analyzed: 05/13/2008 11:37

Source: C802021-01

Nitrate/Nitrite as N	1.3	8	0.10	mg/L	1.28	0.004	97	80-120	1	25	
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QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch BE1003 - NO PREP

Batch BE19005 - NO PREP

Blank (BE19005-BLK1)

Prepared: 05/19/2008 07:54 Analyzed: 05/19/2008 10:29



Chloride 1.0 3 5.0 mg/L

LCS (BE19005-BL1)

Prepared: 05/19/2008 07:54 Analyzed: 05/19/2008 10:29



Chloride 99 8 5.0 mg/L 100 99 80-120

Matrix Spike (BE19005-MS1)

Prepared: 05/19/2008 07:54 Analyzed: 05/19/2008 10:30

Source: C004574-02



Chloride 170 8 5.0 mg/L 100 83 87 80-120

Matrix Spike Dup (BE19005-MSD1)

Prepared: 05/19/2008 07:54 Analyzed: 05/19/2008 10:31

Source: C004574-02



Chloride 170 8 5.0 mg/L 100 83 88 80-120 0.5 25

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch BE00002 - NO PREP ANALYTIX

Blank (BE00002-BLK1)

Prepared: 05/08/2008 07:48 Analyzed: 05/08/2008 10:46



Component	Peak 1	Peak 2	Peak 3	Peak 4
Methane	0.0004	U	0.001	mg/L
Ethane	0.001	U	0.002	mg/L
Ethene	0.0009	U	0.002	mg/L

LCS (BE00002-BL1)

Prepared: 05/08/2008 07:48 Analyzed: 05/08/2008 10:59



Component	Peak 1	Peak 2	Peak 3	Peak 4	Peak 5	Peak 6
Methane	0.0020	0.001	mg/L	0.0052	97	68-140
Ethane	0.138	0.002	mg/L	0.166	95	67-134
Ethene	0.171	0.002	mg/L	0.178	96	62-153

Matrix Spike (BE00002-MS1)

Prepared: 05/08/2008 07:48 Analyzed: 05/08/2008 11:06

Source: B003210-01



Component	Peak 1	Peak 2	Peak 3	Peak 4	Peak 5	Peak 6
Methane	0.0077	0.001	mg/L	0.0052	0.000570	102 68-140
Ethane	0.164	0.002	mg/L	0.166	0.001 U	99 67-134
Ethene	0.178	0.002	mg/L	0.178	0.0009 U	100 62-153

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 8E0002 - NO PREP ANALYTIX

Matrix Spike Dup (8E0002-MSD1)

Prepared: 05/08/2008 07:46 Analyzed: 05/08/2008 11:17

Source: 8863210-01

Methane	0.0677	0.001	mg/L	0.0932	0.000570	91	68-140	11	19
Ethane	0.152	0.002	mg/L	0.166	0.001 U	91	67-134	8	19
Ethane	0.162	0.002	mg/L	0.178	0.0009 U	91	62-153	10	20

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 8E07008 - NO PREP

Blank (8E07008-BLK1)

Prepared: 05/07/2008 10:35 Analyzed: 05/07/2008 12:28

Total Organic Carbon	0.32	U	1.0	mg/L					
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LCS (8E07008-BL1)

Prepared: 05/07/2008 10:35 Analyzed: 05/07/2008 12:28

Total Organic Carbon	43	1.0	mg/L	41.6	104	65-113			
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Matrix Spike (8E07008-MS1)

Prepared: 05/07/2008 10:35 Analyzed: 05/07/2008 12:28

Source: A802457-04

Total Organic Carbon	44	1.0	mg/L	46.8	1.9	105	65-113		
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Matrix Spike Dup (8E07008-MSD1)

Prepared: 05/07/2008 10:35 Analyzed: 05/07/2008 12:28

Source: A802457-04

Total Organic Carbon	48	1.0	mg/L	40.0	1.9	116	65-113	10	21
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Batch 8E07020 - NO PREP

Blank (8E07020-BLK1)

Prepared & Analyzed: 05/07/2008 16:23

Iron, Ferrous	0.042	U	0.050	mg/L					
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LCS (8E07020-BL1)

Prepared & Analyzed: 05/07/2008 16:23

Iron, Ferrous	1.5	0.050	mg/L	1.50	99	90-118			
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Matrix Spike (8E07020-MS1)

Prepared & Analyzed: 05/07/2008 16:23

Source: A802410-01

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch SE07020 - NO PREP

Matrix Spike (SE07020-MS1) Continued

Prepared & Analyzed: 05/07/2008 16:23

Source: A802410-01



Iron, Ferrous 1.5 0.090 mg/L 1.90 0.042 U 103 90-110

Matrix Spike Dup (SE07020-MSD1)

Prepared & Analyzed: 05/07/2008 16:23

Source: A802410-01



Iron, Ferrous 1.6 0.090 mg/L 1.90 0.042 U 105 90-110 2 10

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
I-01	Result is estimated due to positive results in the associated method blank.
Q	Analysis performed outside of method - specified holding time.
QB-01	The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-13	Suspected matrix effects

APPENDIX II
Laboratory Results Report – Preliminary Screening Of Anaerobic
Biodegradation Processes

Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090 FAX: 919.467.3515



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Thursday, October 27, 2011

S&ME, Inc. (SM004)

Attn: Edmund Henriques

3718 Old Battleground Rd.

Greensboro, NC 27410

RE: Laboratory Results for

Project Number: [none], Project Name/Desc: White Street Landfill App Is (SMWs)

ENCO Workorder: C112116

Dear Edmund Henriques,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Tuesday, October 11, 2011.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith". The signature is stylized with a large, looped "C" and a cursive "Smith".

Chuck Smith

Project Manager

Enclosure(s)



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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID:	4103-SHW1	Lab ID: C112116-01	Sampled: 10/07/11 11:50	Received: 10/11/11 12:20
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/04/12	10/13/11 11:35	10/21/2011 10:25	
EPA 6020A	04/04/12	10/19/11 10:00	10/25/2011 14:04	
EPA 8260B	10/21/11	10/12/11 13:22	10/13/2011 14:10	

Client ID:	4103-SHW3	Lab ID: C112116-02	Sampled: 10/07/11 09:25	Received: 10/11/11 12:20
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/04/12	10/13/11 11:35	10/21/2011 10:27	
EPA 6020A	04/04/12	10/19/11 10:00	10/25/2011 14:06	
EPA 8260B	10/21/11	10/12/11 13:22	10/13/2011 14:39	

Client ID:	4103-SHW4	Lab ID: C112116-03	Sampled: 10/07/11 12:40	Received: 10/11/11 12:20
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/04/12	10/13/11 11:35	10/21/2011 10:29	
EPA 6020A	04/04/12	10/19/11 10:00	10/25/2011 14:07	
EPA 8260B	10/21/11	10/12/11 13:22	10/13/2011 15:08	



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NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 4103-SMW1		Lab ID: C112116-01							
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	4.29	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	114		1	1.00	10.0	100	ug/L	EPA 6010C	
Cadmium - Total	3.52		1	0.360	1.00	1	ug/L	EPA 6010C	
Chromium - Total	1.89	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	7.70	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	9.63	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	2.89	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	3.91	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	260		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 4103-SMW3		Lab ID: C112116-02							
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	0.88	J	1	0.080	1.0	5	ug/L	EPA 8260B	
Barium - Total	78.4	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	3.44	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	1.2	J	1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	1.45	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	7.38	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	2.17	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	12.8	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	9.04	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 4103-SMW4		Lab ID: C112116-03							
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	128		1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	1.47	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	5.54	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Nickel - Total	3.30	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Selenium - Total	3.57	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Vanadium - Total	2.57	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	8.37	J	1	3.80	10.0	10	ug/L	EPA 6010C	

ANALYTICAL RESULTS

Description: 4103-SMW1

Lab Sample ID: C112116-01

Received: 10/11/11 12:20

Matrix: Ground Water

Sampled: 10/07/11 11:50

Work Order: C112116

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	10/13/11 14:10	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	10/13/11 14:10	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	10/13/11 14:10	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	10/13/11 14:10	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/13/11 14:10	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	10/13/11 14:10	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/13/11 14:10	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/13/11 14:10	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/13/11 14:10	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/13/11 14:10	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/13/11 14:10	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	10/13/11 14:10	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	10/13/11 14:10	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	10/13/11 14:10	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/13/11 14:10	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	10/13/11 14:10	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	10/13/11 14:10	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	10/13/11 14:10	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	10/13/11 14:10	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	10/13/11 14:10	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	10/13/11 14:10	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/13/11 14:10	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	10/13/11 14:10	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/13/11 14:10	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	10/13/11 14:10	JKG	



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Description: 4103-SMW1

Lab Sample ID: C112116-01

Received: 10/11/11 12:20

Matrix: Ground Water

Sampled: 10/07/11 11:50

Work Order: C112116

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/13/11 14:10	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	10/13/11 14:10	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	10/13/11 14:10	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	47	1	50.0	93 %	51-122	1J12021	EPA 8260B	10/13/11 14:10	JKG	
Dibromofluoromethane	46	1	50.0	92 %	68-117	1J12021	EPA 8260B	10/13/11 14:10	JKG	
Toluene-d8	46	1	50.0	91 %	69-110	1J12021	EPA 8260B	10/13/11 14:10	JKG	

Description: 4103-SMW1

Lab Sample ID: C112116-01

Received: 10/11/11 12:20

Matrix: Ground Water

Sampled: 10/07/11 11:50

Work Order: C112116

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/25/11 14:04	VLO	
Arsenic [7440-38-2] ^	4.29	J	ug/L	1	2.80	10.0	10	EPA 6010C	10/21/11 10:25	JDH	
Barium [7440-39-3] ^	114		ug/L	1	1.00	10.0	100	EPA 6010C	10/21/11 10:25	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/21/11 10:25	JDH	
Cadmium [7440-43-9] ^	3.52		ug/L	1	0.360	1.00	1	EPA 6010C	10/21/11 10:25	JDH	
Chromium [7440-47-3] ^	1.89	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/21/11 10:25	JDH	
Cobalt [7440-48-4] ^	7.70	J	ug/L	1	1.10	10.0	10	EPA 6010C	10/21/11 10:25	JDH	
Copper [7440-50-8] ^	9.63	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/21/11 10:25	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/21/11 10:25	JDH	
Nickel [7440-02-0] ^	2.89	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/21/11 10:25	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/25/11 14:04	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/21/11 10:25	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/25/11 14:04	VLO	
Vanadium [7440-62-2] ^	3.91	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/21/11 10:25	JDH	
Zinc [7440-66-6] ^	260		ug/L	1	3.80	10.0	10	EPA 6010C	10/21/11 10:25	JDH	



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Description: 4103-SMW3

Lab Sample ID: C112116-02

Received: 10/11/11 12:20

Matrix: Ground Water

Sampled: 10/07/11 09:25

Work Order: C112116

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	10/13/11 14:39	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	10/13/11 14:39	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
1,1-Dichloroethane [75-34-3] ^	0.88	J	ug/L	1	0.080	1.0	5	EPA 8260B	10/13/11 14:39	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	10/13/11 14:39	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/13/11 14:39	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	10/13/11 14:39	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/13/11 14:39	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/13/11 14:39	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/13/11 14:39	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/13/11 14:39	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/13/11 14:39	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	10/13/11 14:39	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	10/13/11 14:39	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	10/13/11 14:39	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/13/11 14:39	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	10/13/11 14:39	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	10/13/11 14:39	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	10/13/11 14:39	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	1.2	J	ug/L	1	0.72	1.0	5	EPA 8260B	10/13/11 14:39	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	10/13/11 14:39	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	10/13/11 14:39	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/13/11 14:39	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	10/13/11 14:39	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/13/11 14:39	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 14:39	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/13/11 14:39	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	10/13/11 14:39	JKG	



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Description: 4103-SMW3

Matrix: Ground Water

Project: White Street Landfill App Is (SMWs)

Lab Sample ID: C112116-02

Sampled: 10/07/11 09:25

Sampled By: Gary Simcox

Received: 10/11/11 12:20

Work Order: C112116

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	10/13/11 14:39	JKG	
<hr/>											
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	47	1	50.0	94 %	51-122	1J12021	EPA 8260B	10/13/11 14:39	JKG		
Dibromofluoromethane	45	1	50.0	90 %	68-117	1J12021	EPA 8260B	10/13/11 14:39	JKG		
Toluene-d8	46	1	50.0	91 %	69-110	1J12021	EPA 8260B	10/13/11 14:39	JKG		



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Description: 4103-SMW3

Lab Sample ID: C112116-02

Received: 10/11/11 12:20

Matrix: Ground Water

Sampled: 10/07/11 09:25

Work Order: C112116

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/25/11 14:06	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/21/11 10:27	JDH	
Barium [7440-39-3] ^	78.4	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/21/11 10:27	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/21/11 10:27	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/21/11 10:27	JDH	
Chromium [7440-47-3] ^	3.44	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/21/11 10:27	JDH	
Cobalt [7440-48-4] ^	1.45	J	ug/L	1	1.10	10.0	10	EPA 6010C	10/21/11 10:27	JDH	
Copper [7440-50-8] ^	7.38	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/21/11 10:27	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/21/11 10:27	JDH	
Nickel [7440-02-0] ^	2.17	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/21/11 10:27	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/25/11 14:06	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/21/11 10:27	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/25/11 14:06	VLO	
Vanadium [7440-62-2] ^	12.8	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/21/11 10:27	JDH	
Zinc [7440-66-6] ^	9.04	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/21/11 10:27	JDH	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

Description: 4103-SMW4

Matrix: Ground Water

Project: White Street Landfill App Is (SMWs)

Lab Sample ID: C112116-03

Sampled: 10/07/11 12:40

Sampled By: Gary Simcox

Received: 10/11/11 12:20

Work Order: C112116

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	10/13/11 15:08	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	10/13/11 15:08	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	10/13/11 15:08	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	10/13/11 15:08	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/13/11 15:08	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	10/13/11 15:08	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/13/11 15:08	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/13/11 15:08	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/13/11 15:08	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/13/11 15:08	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/13/11 15:08	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	10/13/11 15:08	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	10/13/11 15:08	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	10/13/11 15:08	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/13/11 15:08	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	10/13/11 15:08	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	10/13/11 15:08	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	10/13/11 15:08	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	10/13/11 15:08	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	10/13/11 15:08	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	10/13/11 15:08	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/13/11 15:08	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	10/13/11 15:08	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/13/11 15:08	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 15:08	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/13/11 15:08	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	10/13/11 15:08	JKG	



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Description: 4103-SMW4

Lab Sample ID: C112116-03

Received: 10/11/11 12:20

Matrix: Ground Water

Sampled: 10/07/11 12:40

Work Order: C112116

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	10/13/11 15:08	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	46	1	50.0	92 %	51-122	1J12021	EPA 8260B	10/13/11 15:08	JKG		
Dibromofluoromethane	46	1	50.0	93 %	68-117	1J12021	EPA 8260B	10/13/11 15:08	JKG		
Toluene-d8	45	1	50.0	90 %	69-110	1J12021	EPA 8260B	10/13/11 15:08	JKG		



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Description: 4103-SMW4

Matrix: Ground Water

Project: White Street Landfill App Is (SMWs)

Lab Sample ID: C112116-03

Sampled: 10/07/11 12:40

Sampled By: Gary Simcox

Received: 10/11/11 12:20

Work Order: C112116

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/25/11 14:07	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/21/11 10:29	JDH	
Barium [7440-39-3] ^	128		ug/L	1	1.00	10.0	100	EPA 6010C	10/21/11 10:29	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/21/11 10:29	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/21/11 10:29	JDH	
Chromium [7440-47-3] ^	1.47	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/21/11 10:29	JDH	
Cobalt [7440-48-4] ^	5.54	J	ug/L	1	1.10	10.0	10	EPA 6010C	10/21/11 10:29	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/21/11 10:29	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/21/11 10:29	JDH	
Nickel [7440-02-0] ^	3.30	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/21/11 10:29	JDH	
Selenium [7782-49-2] ^	3.57	J	ug/L	1	0.830	1.00	10	EPA 6020A	10/25/11 14:07	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/21/11 10:29	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/25/11 14:07	VLO	
Vanadium [7440-62-2] ^	2.57	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/21/11 10:29	JDH	
Zinc [7440-66-6] ^	8.37	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/21/11 10:29	JDH	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1J12021 - EPA 5030B_MS

Blank (1J12021-BLK1)

Prepared: 10/12/2011 13:22 Analyzed: 10/13/2011 10:48

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Ethylbenzene	0.62	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.14	U	1.0	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	46			ug/L	50.0		91	51-122			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1J12021 - EPA 5030B_MS

Blank (1J12021-BLK1) Continued

Prepared: 10/12/2011 13:22 Analyzed: 10/13/2011 10:48

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	45			ug/L	50.0		91	68-117			
Surrogate: Toluene-d8	45			ug/L	50.0		90	69-110			

LCS (1J12021-BS1)

Prepared: 10/12/2011 13:22 Analyzed: 10/13/2011 11:17

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	18		1.0	ug/L	20.0		92	75-133			
Benzene	18		1.0	ug/L	20.0		92	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		105	83-117			
Toluene	21		1.0	ug/L	20.0		103	71-118			
Trichloroethene	21		1.0	ug/L	20.0		107	75-115			

Matrix Spike (1J12021-MS1)

Prepared: 10/12/2011 13:22 Analyzed: 10/13/2011 11:46

Source: C112771-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.60 U	98	75-133			
Benzene	19		1.0	ug/L	20.0	0.68 U	94	81-134			
Chlorobenzene	22		1.0	ug/L	20.0	0.74 U	108	83-117			
Toluene	21		1.0	ug/L	20.0	0.85 U	106	71-118			
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	110	75-115			

Matrix Spike Dup (1J12021-MSD1)

Prepared: 10/12/2011 13:22 Analyzed: 10/13/2011 12:15

Source: C112771-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.60 U	95	75-133	3	20	
Benzene	18		1.0	ug/L	20.0	0.68 U	92	81-134	3	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	105	83-117	2	16	
Toluene	21		1.0	ug/L	20.0	0.85 U	103	71-118	3	17	
Trichloroethene	21		1.0	ug/L	20.0	0.72 U	107	75-115	3	18	

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 1J13014 - EPA 3005A

Blank (1J13014-BLK1)

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 1J13014 - EPA 3005A

Blank (1J13014-BLK1) Continued

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (1J13014-BS1)

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	202		10.0	ug/L	200		101	80-120			
Barium	209		10.0	ug/L	200		105	80-120			
Beryllium	20.2		1.00	ug/L	20.0		101	80-120			
Cadmium	21.2		1.00	ug/L	20.0		106	80-120			
Chromium	202		10.0	ug/L	200		101	80-120			
Cobalt	207		10.0	ug/L	200		103	80-120			
Copper	200		10.0	ug/L	200		100	80-120			
Lead	204		10.0	ug/L	200		102	80-120			
Nickel	209		10.0	ug/L	200		104	80-120			
Silver	209		10.0	ug/L	200		104	80-120			
Vanadium	204		10.0	ug/L	200		102	80-120			
Zinc	207		10.0	ug/L	200		104	80-120			

Matrix Spike (1J13014-MS1)

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:09

Source: C112155-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	199		10.0	ug/L	200	4.22	97	75-125			
Barium	294		10.0	ug/L	200	90.7	102	75-125			
Beryllium	20.1		1.00	ug/L	20.0	0.264	99	75-125			
Cadmium	21.1		1.00	ug/L	20.0	0.360 U	105	75-125			
Chromium	200		10.0	ug/L	200	1.00 U	100	75-125			
Cobalt	207		10.0	ug/L	200	1.10 U	104	75-125			
Copper	196		10.0	ug/L	200	1.60 U	98	75-125			
Lead	202		10.0	ug/L	200	1.90 U	101	75-125			
Nickel	209		10.0	ug/L	200	1.80 U	105	75-125			
Silver	203		10.0	ug/L	200	1.90 U	102	75-125			
Vanadium	203		10.0	ug/L	200	1.82	101	75-125			
Zinc	214		10.0	ug/L	200	5.72	104	75-125			

Matrix Spike Dup (1J13014-MSD1)

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:11

Source: C112155-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	200		10.0	ug/L	200	4.22	98	75-125	0.7	20	
Barium	294		10.0	ug/L	200	90.7	102	75-125	0.2	20	
Beryllium	20.3		1.00	ug/L	20.0	0.264	100	75-125	1	20	
Cadmium	21.2		1.00	ug/L	20.0	0.360 U	106	75-125	0.6	20	
Chromium	201		10.0	ug/L	200	1.00 U	101	75-125	0.8	20	
Cobalt	208		10.0	ug/L	200	1.10 U	104	75-125	0.2	20	

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 1J13014 - EPA 3005A

Matrix Spike Dup (1J13014-MSD1) Continued

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:11

Source: C112155-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Copper	197		10.0	ug/L	200	1.60 U	99	75-125	0.8	20	
Lead	205		10.0	ug/L	200	1.90 U	102	75-125	1	20	
Nickel	209		10.0	ug/L	200	1.80 U	104	75-125	0.4	20	
Silver	205		10.0	ug/L	200	1.90 U	102	75-125	0.6	20	
Vanadium	205		10.0	ug/L	200	1.82	101	75-125	0.7	20	
Zinc	214		10.0	ug/L	200	5.72	104	75-125	0.1	20	

Post Spike (1J13014-PS1)

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:12

Source: C112155-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.187		0.0100	mg/L	0.200	0.00422	92	80-120			
Barium	0.275		0.0100	mg/L	0.200	0.0907	92	80-120			
Beryllium	0.0189		0.00100	mg/L	0.0200	0.000264	93	80-120			
Cadmium	0.0198		0.00100	mg/L	0.0200	8.46E-5	98	80-120			
Chromium	0.188		0.0100	mg/L	0.200	0.000933	93	80-120			
Cobalt	0.193		0.0100	mg/L	0.200	0.000420	96	80-120			
Copper	0.182		0.0100	mg/L	0.200	-0.000268	91	80-120			
Lead	0.190		0.0100	mg/L	0.200	-0.000440	95	80-120			
Nickel	0.194		0.0100	mg/L	0.200	0.00111	96	80-120			
Silver	0.189		0.0100	mg/L	0.200	0.000457	94	80-120			
Vanadium	0.190		0.0100	mg/L	0.200	0.00182	94	80-120			
Zinc	0.200		0.0100	mg/L	0.200	0.00572	97	80-120			

Batch 1J18032 - EPA 3005A

Blank (1J18032-BLK1)

Prepared: 10/19/2011 10:00 Analyzed: 10/25/2011 13:44

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (1J18032-BS1)

Prepared: 10/19/2011 10:00 Analyzed: 10/25/2011 13:46

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	205		2.00	ug/L	200		103	80-120			
Selenium	221		1.00	ug/L	200		111	80-120			
Thallium	206		1.00	ug/L	200		103	80-120			

Matrix Spike (1J18032-MS1)

Prepared: 10/19/2011 10:00 Analyzed: 10/25/2011 13:49

Source: C112115-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	206		2.00	ug/L	200	0.220 U	103	75-125			
Selenium	216		1.00	ug/L	200	3.59	106	75-125			



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QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 1J18032 - EPA 3005A

Matrix Spike (1J18032-MS1) Continued

Prepared: 10/19/2011 10:00 Analyzed: 10/25/2011 13:49

Source: C112115-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Thallium	192		1.00	ug/L	200	0.154	96	75-125			

Matrix Spike Dup (1J18032-MSD1)

Prepared: 10/19/2011 10:00 Analyzed: 10/25/2011 13:50

Source: C112115-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	205		2.00	ug/L	200	0.220 U	103	75-125	0.5	20	
Selenium	218		1.00	ug/L	200	3.59	107	75-125	0.9	20	
Thallium	191		1.00	ug/L	200	0.154	96	75-125	0.4	20	

Post Spike (1J18032-PS1)

Prepared: 10/19/2011 10:00 Analyzed: 10/25/2011 13:51

Source: C112115-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	207		2.00	ug/L	200	0.139	104	80-120			
Selenium	214		1.00	ug/L	200	3.59	105	80-120			
Thallium	185		1.00	ug/L	200	0.154	93	80-120			

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.

Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090

FAX: 919.467.3515



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Thursday, October 27, 2011

S&ME, Inc. (SM004)

Attn: Edmund Henriques

3718 Old Battleground Rd.

Greensboro, NC 27410

RE: Laboratory Results for

Project Number: [none], Project Name/Desc: White Street Landfill App Is

ENCO Workorder: C112115

Dear Edmund Henriques,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Tuesday, October 11, 2011.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith". The signature is written in a cursive, flowing style with a large initial "C" and a stylized "S".

Chuck Smith

Project Manager

Enclosure(s)



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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 4103-II3B	Lab ID: C112115-01	Sampled: 10/07/11 10:35	Received: 10/11/11 12:20
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/04/12	10/13/11 11:35	10/21/2011 10:16
EPA 6020A	04/04/12	10/19/11 10:00	10/25/2011 13:47

Client ID: 4103-II3B	Lab ID: C112115-01RE1	Sampled: 10/07/11 10:35	Received: 10/11/11 12:20
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	10/21/11	10/17/11 11:17	10/17/2011 13:42

Client ID: 4103-II9	Lab ID: C112115-02	Sampled: 10/07/11 08:10	Received: 10/11/11 12:20
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/04/12	10/13/11 11:35	10/21/2011 10:23
EPA 6020A	04/04/12	10/19/11 10:00	10/25/2011 13:54
EPA 8260B	10/21/11	10/12/11 13:22	10/13/2011 13:41



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NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 4103-II38	Lab ID: C112115-01
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	202		1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	7.42	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	7.05	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	2.62	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	8.29	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Selenium - Total	3.59	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Thallium - Total	0.154	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Vanadium - Total	8.23	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	5.78	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 4103-II38	Lab ID: C112115-01RE1
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	0.88	J	1	0.080	1.0	5	ug/L	EPA 8260B	

Client ID: 4103-II9	Lab ID: C112115-02
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	5.8		1	0.080	1.0	5	ug/L	EPA 8260B	
Barium - Total	78.4	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Cadmium - Total	1.05		1	0.360	1.00	1	ug/L	EPA 6010C	
Chromium - Total	4.13	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	16		1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	6.38	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	9.54	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Lead - Total	2.37	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	3.25	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Selenium - Total	1.95	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Vanadium - Total	9.48	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Vinyl chloride	0.69	J	1	0.60	1.0	1	ug/L	EPA 8260B	
Zinc - Total	62.0		1	3.80	10.0	10	ug/L	EPA 6010C	

ANALYTICAL RESULTS

Description: 4103-II3B

Lab Sample ID: C112115-01

Received: 10/11/11 12:20

Matrix: Ground Water

Sampled: 10/07/11 10:35

Work Order: C112115

Project: White Street Landfill App Is

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	10/17/11 13:42	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	10/17/11 13:42	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
1,1-Dichloroethane [75-34-3] ^	0.88	J	ug/L	1	0.080	1.0	5	EPA 8260B	10/17/11 13:42	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	10/17/11 13:42	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/17/11 13:42	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	10/17/11 13:42	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/17/11 13:42	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/17/11 13:42	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/17/11 13:42	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/17/11 13:42	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/17/11 13:42	jkg	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	10/17/11 13:42	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	10/17/11 13:42	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	10/17/11 13:42	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/17/11 13:42	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	10/17/11 13:42	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	10/17/11 13:42	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	10/17/11 13:42	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	10/17/11 13:42	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	10/17/11 13:42	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	10/17/11 13:42	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/17/11 13:42	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	10/17/11 13:42	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/17/11 13:42	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	10/17/11 13:42	jkg	



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Description: 4103-II3B

Lab Sample ID: C112115-01

Received: 10/11/11 12:20

Matrix: Ground Water

Sampled: 10/07/11 10:35

Work Order: C112115

Project: White Street Landfill App Is

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/17/11 13:42	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	10/17/11 13:42	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	10/17/11 13:42	jkg	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	49	1	50.0	98 %	51-122	1J17003	EPA 8260B	10/17/11 13:42	jkg		
Dibromofluoromethane	50	1	50.0	100 %	68-117	1J17003	EPA 8260B	10/17/11 13:42	jkg		
Toluene-d8	52	1	50.0	105 %	69-110	1J17003	EPA 8260B	10/17/11 13:42	jkg		



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Description: 4103-II3B

Matrix: Ground Water

Project: White Street Landfill App Is

Lab Sample ID: C112115-01

Sampled: 10/07/11 10:35

Sampled By: Gary Simcox

Received: 10/11/11 12:20

Work Order: C112115

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/25/11 13:47	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/21/11 10:16	JDH	
Barium [7440-39-3] ^	202		ug/L	1	1.00	10.0	100	EPA 6010C	10/21/11 10:16	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/21/11 10:16	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/21/11 10:16	JDH	
Chromium [7440-47-3] ^	7.42	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/21/11 10:16	JDH	
Cobalt [7440-48-4] ^	7.05	J	ug/L	1	1.10	10.0	10	EPA 6010C	10/21/11 10:16	JDH	
Copper [7440-50-8] ^	2.62	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/21/11 10:16	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/21/11 10:16	JDH	
Nickel [7440-02-0] ^	8.29	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/21/11 10:16	JDH	
Selenium [7782-49-2] ^	3.59	J	ug/L	1	0.830	1.00	10	EPA 6020A	10/25/11 13:47	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/21/11 10:16	JDH	
Thallium [7440-28-0] ^	0.154	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/25/11 13:47	VLO	
Vanadium [7440-62-2] ^	8.23	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/21/11 10:16	JDH	
Zinc [7440-66-6] ^	5.78	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/21/11 10:16	JDH	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.



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Description: 4103-II9

Matrix: Ground Water

Project: White Street Landfill App Is

Lab Sample ID: C112115-02

Sampled: 10/07/11 08:10

Sampled By: Gary Simcox

Received: 10/11/11 12:20

Work Order: C112115

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	10/13/11 13:41	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	10/13/11 13:41	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
1,1-Dichloroethane [75-34-3] ^	5.8		ug/L	1	0.080	1.0	5	EPA 8260B	10/13/11 13:41	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	10/13/11 13:41	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/13/11 13:41	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	10/13/11 13:41	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/13/11 13:41	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/13/11 13:41	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/13/11 13:41	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/13/11 13:41	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/13/11 13:41	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	10/13/11 13:41	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	10/13/11 13:41	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	10/13/11 13:41	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/13/11 13:41	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	10/13/11 13:41	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	10/13/11 13:41	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	10/13/11 13:41	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	16		ug/L	1	0.72	1.0	5	EPA 8260B	10/13/11 13:41	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	10/13/11 13:41	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	10/13/11 13:41	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/13/11 13:41	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	10/13/11 13:41	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/13/11 13:41	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/13/11 13:41	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/13/11 13:41	JKG	
Vinyl chloride [75-01-4] ^	0.69	J	ug/L	1	0.60	1.0	1	EPA 8260B	10/13/11 13:41	JKG	



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Description: 4103-II9

Lab Sample ID: C112115-02

Received: 10/11/11 12:20

Matrix: Ground Water

Sampled: 10/07/11 08:10

Work Order: C112115

Project: White Street Landfill App Is

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	10/13/11 13:41	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	47	1	50.0	94 %	51-122	1J12021	EPA 8260B	10/13/11 13:41	JKG		
Dibromofluoromethane	44	1	50.0	87 %	68-117	1J12021	EPA 8260B	10/13/11 13:41	JKG		
Toluene-d8	45	1	50.0	90 %	69-110	1J12021	EPA 8260B	10/13/11 13:41	JKG		

Description: 4103-II9

Lab Sample ID: C112115-02

Received: 10/11/11 12:20

Matrix: Ground Water

Sampled: 10/07/11 08:10

Work Order: C112115

Project: White Street Landfill App Is

Sampled By: Gary Simcox

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/25/11 13:54	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/21/11 10:23	JDH	
Barium [7440-39-3] ^	78.4	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/21/11 10:23	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/21/11 10:23	JDH	
Cadmium [7440-43-9] ^	1.05		ug/L	1	0.360	1.00	1	EPA 6010C	10/21/11 10:23	JDH	
Chromium [7440-47-3] ^	4.13	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/21/11 10:23	JDH	
Cobalt [7440-48-4] ^	6.38	J	ug/L	1	1.10	10.0	10	EPA 6010C	10/21/11 10:23	JDH	
Copper [7440-50-8] ^	9.54	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/21/11 10:23	JDH	
Lead [7439-92-1] ^	2.37	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/21/11 10:23	JDH	
Nickel [7440-02-0] ^	3.25	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/21/11 10:23	JDH	
Selenium [7782-49-2] ^	1.95	J	ug/L	1	0.830	1.00	10	EPA 6020A	10/25/11 13:54	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/21/11 10:23	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/25/11 13:54	VLO	
Vanadium [7440-62-2] ^	9.48	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/21/11 10:23	JDH	
Zinc [7440-66-6] ^	62.0		ug/L	1	3.80	10.0	10	EPA 6010C	10/21/11 10:23	JDH	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1J12021 - EPA 5030B_MS

Blank (1J12021-BLK1)

Prepared: 10/12/2011 13:22 Analyzed: 10/13/2011 10:48

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Ethylbenzene	0.62	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.14	U	1.0	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	46			ug/L	50.0		91	51-122			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1J12021 - EPA 5030B_MS

Blank (1J12021-BLK1) Continued

Prepared: 10/12/2011 13:22 Analyzed: 10/13/2011 10:48

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	45			ug/L	50.0		91	68-117			
Surrogate: Toluene-d8	45			ug/L	50.0		90	69-110			

LCS (1J12021-BS1)

Prepared: 10/12/2011 13:22 Analyzed: 10/13/2011 11:17

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	18		1.0	ug/L	20.0		92	75-133			
Benzene	18		1.0	ug/L	20.0		92	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		105	83-117			
Toluene	21		1.0	ug/L	20.0		103	71-118			
Trichloroethene	21		1.0	ug/L	20.0		107	75-115			

Matrix Spike (1J12021-MS1)

Prepared: 10/12/2011 13:22 Analyzed: 10/13/2011 11:46

Source: C112771-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.60 U	98	75-133			
Benzene	19		1.0	ug/L	20.0	0.68 U	94	81-134			
Chlorobenzene	22		1.0	ug/L	20.0	0.74 U	108	83-117			
Toluene	21		1.0	ug/L	20.0	0.85 U	106	71-118			
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	110	75-115			

Matrix Spike Dup (1J12021-MSD1)

Prepared: 10/12/2011 13:22 Analyzed: 10/13/2011 12:15

Source: C112771-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.60 U	95	75-133	3	20	
Benzene	18		1.0	ug/L	20.0	0.68 U	92	81-134	3	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	105	83-117	2	16	
Toluene	21		1.0	ug/L	20.0	0.85 U	103	71-118	3	17	
Trichloroethene	21		1.0	ug/L	20.0	0.72 U	107	75-115	3	18	

Batch 1J13020 - EPA 5030B_MS

Blank (1J13020-BLK1)

Prepared: 10/13/2011 12:35 Analyzed: 10/13/2011 23:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							



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Batch 1J13020 - EPA 5030B_MS

Blank (1J13020-BLK1) Continued

Prepared: 10/13/2011 12:35 Analyzed: 10/13/2011 23:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Ethylbenzene	0.62	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.14	U	1.0	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	46			ug/L	50.0		91	51-122			
Surrogate: Dibromofluoromethane	53			ug/L	50.0		106	68-117			
Surrogate: Toluene-d8	49			ug/L	50.0		97	69-110			

LCS (1J13020-BS1)

Prepared: 10/13/2011 12:35 Analyzed: 10/14/2011 00:19

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	17		1.0	ug/L	20.0		86	75-133			
Benzene	17		1.0	ug/L	20.0		87	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		100	83-117			
Toluene	20		1.0	ug/L	20.0		100	71-118			



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Batch 1J13020 - EPA 5030B_MS

LCS (1J13020-BS1) Continued

Prepared: 10/13/2011 12:35 Analyzed: 10/14/2011 00:19

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichloroethene	21		1.0	ug/L	20.0		105	75-115			

Matrix Spike (1J13020-MS1)

Prepared: 10/13/2011 12:35 Analyzed: 10/14/2011 00:48

Source: C112771-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.60 U	93	75-133			
Benzene	19		1.0	ug/L	20.0	0.68 U	96	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	107	83-117			
Toluene	23		1.0	ug/L	20.0	0.85 U	117	71-118			
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	112	75-115			

Matrix Spike Dup (1J13020-MSD1)

Prepared: 10/13/2011 12:35 Analyzed: 10/14/2011 01:17

Source: C112771-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	18		1.0	ug/L	20.0	0.60 U	92	75-133	1	20	
Benzene	18		1.0	ug/L	20.0	0.68 U	91	81-134	5	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.74 U	102	83-117	5	16	
Toluene	21		1.0	ug/L	20.0	0.85 U	105	71-118	11	17	
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	108	75-115	3	18	

Batch 1J17003 - EPA 5030B_MS

Blank (1J17003-BLK1)

Prepared: 10/17/2011 08:22 Analyzed: 10/17/2011 11:14

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							



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QUALITY CONTROL**Volatile Organic Compounds by GCMS - Quality Control**

Batch 1J17003 - EPA 5030B_MS

Blank (1J17003-BLK1) Continued

Prepared: 10/17/2011 08:22 Analyzed: 10/17/2011 11:14

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Ethylbenzene	0.62	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.14	U	1.0	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
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Surrogate: 4-Bromofluorobenzene	49			ug/L	50.0		98	51-122			
Surrogate: Dibromofluoromethane	49			ug/L	50.0		98	68-117			
Surrogate: Toluene-d8	53			ug/L	50.0		107	69-110			

LCS (1J17003-BS1)

Prepared: 10/17/2011 08:22 Analyzed: 10/17/2011 11:44

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0		96	75-133			
Benzene	22		1.0	ug/L	20.0		109	81-134			
Chlorobenzene	18		1.0	ug/L	20.0		90	83-117			
Toluene	16		1.0	ug/L	20.0		80	71-118			
Trichloroethene	19		1.0	ug/L	20.0		95	75-115			

Matrix Spike (1J17003-MS1)

Prepared: 10/17/2011 08:22 Analyzed: 10/17/2011 12:13

Source: C112996-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.60 U	99	75-133			
Benzene	22		1.0	ug/L	20.0	-1.0	117	81-134			
Chlorobenzene	19		1.0	ug/L	20.0	0.74 U	93	83-117			
Toluene	18		1.0	ug/L	20.0	0.85 U	88	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.72 U	102	75-115			



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QUALITY CONTROL**Volatile Organic Compounds by GCMS - Quality Control**

Batch 1J17003 - EPA 5030B_MS

Matrix Spike Dup (1J17003-MSD1)

Prepared: 10/17/2011 08:22 Analyzed: 10/17/2011 12:43

Source: C112996-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.60 U	95	75-133	4	20	
Benzene	23		1.0	ug/L	20.0	-1.0	118	81-134	0.4	17	
Chlorobenzene	18		1.0	ug/L	20.0	0.74 U	92	83-117	1	16	
Toluene	17		1.0	ug/L	20.0	0.85 U	85	71-118	4	17	
Trichloroethene	19		1.0	ug/L	20.0	0.72 U	97	75-115	5	18	

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 1J13014 - EPA 3005A

Blank (1J13014-BLK1)

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (1J13014-BS1)

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	202		10.0	ug/L	200		101	80-120			
Barium	209		10.0	ug/L	200		105	80-120			
Beryllium	20.2		1.00	ug/L	20.0		101	80-120			
Cadmium	21.2		1.00	ug/L	20.0		106	80-120			
Chromium	202		10.0	ug/L	200		101	80-120			
Cobalt	207		10.0	ug/L	200		103	80-120			
Copper	200		10.0	ug/L	200		100	80-120			
Lead	204		10.0	ug/L	200		102	80-120			
Nickel	209		10.0	ug/L	200		104	80-120			
Silver	209		10.0	ug/L	200		104	80-120			
Vanadium	204		10.0	ug/L	200		102	80-120			
Zinc	207		10.0	ug/L	200		104	80-120			

Matrix Spike (1J13014-MS1)

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:09

Source: C112155-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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QUALITY CONTROL**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**

Batch 1J13014 - EPA 3005A

Matrix Spike (1J13014-MS1) Continued

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:09

Source: C112155-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	199		10.0	ug/L	200	4.22	97	75-125			
Barium	294		10.0	ug/L	200	90.7	102	75-125			
Beryllium	20.1		1.00	ug/L	20.0	0.264	99	75-125			
Cadmium	21.1		1.00	ug/L	20.0	0.360 U	105	75-125			
Chromium	200		10.0	ug/L	200	1.00 U	100	75-125			
Cobalt	207		10.0	ug/L	200	1.10 U	104	75-125			
Copper	196		10.0	ug/L	200	1.60 U	98	75-125			
Lead	202		10.0	ug/L	200	1.90 U	101	75-125			
Nickel	209		10.0	ug/L	200	1.80 U	105	75-125			
Silver	203		10.0	ug/L	200	1.90 U	102	75-125			
Vanadium	203		10.0	ug/L	200	1.82	101	75-125			
Zinc	214		10.0	ug/L	200	5.72	104	75-125			

Matrix Spike Dup (1J13014-MSD1)

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:11

Source: C112155-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	200		10.0	ug/L	200	4.22	98	75-125	0.7	20	
Barium	294		10.0	ug/L	200	90.7	102	75-125	0.2	20	
Beryllium	20.3		1.00	ug/L	20.0	0.264	100	75-125	1	20	
Cadmium	21.2		1.00	ug/L	20.0	0.360 U	106	75-125	0.6	20	
Chromium	201		10.0	ug/L	200	1.00 U	101	75-125	0.8	20	
Cobalt	208		10.0	ug/L	200	1.10 U	104	75-125	0.2	20	
Copper	197		10.0	ug/L	200	1.60 U	99	75-125	0.8	20	
Lead	205		10.0	ug/L	200	1.90 U	102	75-125	1	20	
Nickel	209		10.0	ug/L	200	1.80 U	104	75-125	0.4	20	
Silver	205		10.0	ug/L	200	1.90 U	102	75-125	0.6	20	
Vanadium	205		10.0	ug/L	200	1.82	101	75-125	0.7	20	
Zinc	214		10.0	ug/L	200	5.72	104	75-125	0.1	20	

Post Spike (1J13014-PS1)

Prepared: 10/13/2011 11:35 Analyzed: 10/21/2011 10:12

Source: C112155-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.187		0.0100	mg/L	0.200	0.00422	92	80-120			
Barium	0.275		0.0100	mg/L	0.200	0.0907	92	80-120			
Beryllium	0.0189		0.00100	mg/L	0.0200	0.000264	93	80-120			
Cadmium	0.0198		0.00100	mg/L	0.0200	8.46E-5	98	80-120			
Chromium	0.188		0.0100	mg/L	0.200	0.000933	93	80-120			
Cobalt	0.193		0.0100	mg/L	0.200	0.000420	96	80-120			
Copper	0.182		0.0100	mg/L	0.200	-0.000268	91	80-120			
Lead	0.190		0.0100	mg/L	0.200	-0.000440	95	80-120			
Nickel	0.194		0.0100	mg/L	0.200	0.00111	96	80-120			
Silver	0.189		0.0100	mg/L	0.200	0.000457	94	80-120			
Vanadium	0.190		0.0100	mg/L	0.200	0.00182	94	80-120			
Zinc	0.200		0.0100	mg/L	0.200	0.00572	97	80-120			



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QUALITY CONTROL**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**

Batch 1J13014 - EPA 3005A

Batch 1J18032 - EPA 3005A

Blank (1J18032-BLK1)

Prepared: 10/19/2011 10:00 Analyzed: 10/25/2011 13:44

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (1J18032-BS1)

Prepared: 10/19/2011 10:00 Analyzed: 10/25/2011 13:46

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	205		2.00	ug/L	200		103	80-120			
Selenium	221		1.00	ug/L	200		111	80-120			
Thallium	206		1.00	ug/L	200		103	80-120			

Matrix Spike (1J18032-MS1)

Prepared: 10/19/2011 10:00 Analyzed: 10/25/2011 13:49

Source: C112115-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	206		2.00	ug/L	200	0.220 U	103	75-125			
Selenium	216		1.00	ug/L	200	3.59	106	75-125			
Thallium	192		1.00	ug/L	200	0.154	96	75-125			

Matrix Spike Dup (1J18032-MSD1)

Prepared: 10/19/2011 10:00 Analyzed: 10/25/2011 13:50

Source: C112115-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	205		2.00	ug/L	200	0.220 U	103	75-125	0.5	20	
Selenium	218		1.00	ug/L	200	3.59	107	75-125	0.9	20	
Thallium	191		1.00	ug/L	200	0.154	96	75-125	0.4	20	

Post Spike (1J18032-PS1)

Prepared: 10/19/2011 10:00 Analyzed: 10/25/2011 13:51

Source: C112115-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	207		2.00	ug/L	200	0.139	104	80-120			
Selenium	214		1.00	ug/L	200	3.59	105	80-120			
Thallium	185		1.00	ug/L	200	0.154	93	80-120			

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.

Note: All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist.

Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090

FAX: 919.467.3515



www.encolabs.com

Thursday, August 12, 2010

S&ME, Inc. (SM004)

Attn: Connel Ware

3718 Old Battleground Rd.

Greensboro, NC 27410

RE: Laboratory Results for

Project Number: [none], Project Name/Desc: White Street Landfill App Is (SMWs)

ENCO Workorder: C009061

Dear Connel Ware,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Wednesday, August 4, 2010.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith". The signature is written in a cursive, flowing style with a large initial "C" and a stylized "S".

Chuck Smith

Project Manager

Enclosure(s)

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 4103-SMW1		Lab ID: C009061-01		Sampled: 08/02/10 13:40		Received: 08/04/10 11:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 6010C	01/29/11	08/05/10	09:48	8/10/2010 14:32			
EPA 6020A	01/29/11	08/05/10	14:22	8/10/2010 12:01			
EPA 8260B	08/16/10	08/06/10	12:56	8/6/2010 23:17			

Client ID: 4103-SHW3		Lab ID: C009061-02		Sampled: 08/02/10 12:40		Received: 08/04/10 11:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 6010C	01/29/11	08/05/10	09:48	8/10/2010 14:35			
EPA 6020A	01/29/11	08/05/10	14:22	8/10/2010 12:04			
EPA 8260B	08/16/10	08/06/10	12:56	8/6/2010 22:16			

Client ID: 4103-SMW4		Lab ID: C009061-03		Sampled: 08/02/10 11:30		Received: 08/04/10 11:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 6010C	01/29/11	08/05/10	09:48	8/10/2010 14:38			
EPA 6020A	01/29/11	08/05/10	14:22	8/10/2010 12:08			
EPA 8260B	08/16/10	08/06/10	12:56	8/6/2010 22:47			

Client ID: 4103-TripBlank		Lab ID: C009061-04		Sampled: 08/02/10 11:30		Received: 08/04/10 11:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 8260B	08/16/10	08/06/10	12:56	8/6/2010 21:46			

NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 4103-SMW1				Lab ID: C009061-01					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	4.07	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	144		1	1.00	10.0	100	ug/L	EPA 6010C	
Cadmium - Total	1.78		1	0.360	1.00	1	ug/L	EPA 6010C	
Chloromethane	0.40	J	1	0.34	1.0	1	ug/L	EPA 8260B	
Chromium - Total	2.06	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	15.5		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	11.9		1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	1.86	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	9.30	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	96.8		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 4103-SMW3				Lab ID: C009061-02					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	4.2	J	1	0.33	1.0	5	ug/L	EPA 8260B	
Acetone	3.0	J	1	1.5	5.0	100	ug/L	EPA 8260B	
Barium - Total	228		1	1.00	10.0	100	ug/L	EPA 6010C	
Chloromethane	0.44	J	1	0.34	1.0	1	ug/L	EPA 8260B	
cis-1,2-Dichloroethene	6.9		1	0.36	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	3.12	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	1.66	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Vanadium - Total	3.15	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Vinyl chloride	0.49	J	1	0.30	1.0	1	ug/L	EPA 8260B	
Zinc - Total	5.90	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 4103-SMW4				Lab ID: C009061-03					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	178		1	1.00	10.0	100	ug/L	EPA 6010C	
Cobalt - Total	4.55	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Nickel - Total	4.28	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Selenium - Total	9.47	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Vanadium - Total	2.14	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	7.60	J	1	3.80	10.0	10	ug/L	EPA 6010C	

ANALYTICAL RESULTS

Description: 4103-SMW1

Lab Sample ID: C009061-01

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/02/10 13:40

Work Order: C009061

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 23:17	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.33	U	ug/L	1	0.33	1.0	3	EPA 8260B	08/06/10 23:17	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
1,1-Dichloroethane [75-34-3] ^	0.33	U	ug/L	1	0.33	1.0	5	EPA 8260B	08/06/10 23:17	JKG	
1,1-Dichloroethene [75-35-4] ^	0.24	U	ug/L	1	0.24	1.0	5	EPA 8260B	08/06/10 23:17	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/06/10 23:17	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.27	U	ug/L	1	0.27	1.0	5	EPA 8260B	08/06/10 23:17	JKG	
1,2-Dichloroethane [107-06-2] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
1,2-Dichloropropane [78-87-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	08/06/10 23:17	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	08/06/10 23:17	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/06/10 23:17	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/06/10 23:17	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	08/06/10 23:17	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
Bromochloromethane [74-97-5] ^	0.42	U	ug/L	1	0.42	1.0	3	EPA 8260B	08/06/10 23:17	JKG	
Bromodichloromethane [75-27-4] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
Bromoform [75-25-2] ^	0.71	U	ug/L	1	0.71	1.0	3	EPA 8260B	08/06/10 23:17	JKG	
Bromomethane [74-83-9] ^	0.49	U	ug/L	1	0.49	1.0	10	EPA 8260B	08/06/10 23:17	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	08/06/10 23:17	JKG	
Carbon tetrachloride [56-23-5] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
Chlorobenzene [108-90-7] ^	0.27	U	ug/L	1	0.27	1.0	3	EPA 8260B	08/06/10 23:17	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	08/06/10 23:17	JKG	
Chloroform [67-66-3] ^	0.20	U	ug/L	1	0.20	1.0	5	EPA 8260B	08/06/10 23:17	JKG	
Chloromethane [74-87-3] ^	0.40	J	ug/L	1	0.34	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	08/06/10 23:17	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
Dibromochloromethane [124-48-1] ^	0.32	U	ug/L	1	0.32	1.0	3	EPA 8260B	08/06/10 23:17	JKG	
Dibromomethane [74-95-3] ^	0.37	U	ug/L	1	0.37	1.0	10	EPA 8260B	08/06/10 23:17	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	08/06/10 23:17	JKG	
Methylene chloride [75-09-2] ^	0.53	U	ug/L	1	0.53	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
Styrene [100-42-5] ^	0.26	U	ug/L	1	0.26	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
Tetrachloroethene [127-18-4] ^	0.36	U	ug/L	1	0.36	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/06/10 23:17	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	08/06/10 23:17	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 23:17	JKG	

Description: 4103-SMW1

Lab Sample ID: C009061-01

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/02/10 13:40

Work Order: C009061

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Trichlorofluoromethane [75-69-4] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	08/06/10 23:17	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	08/06/10 23:17	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 23:17	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	41	1	50.0	81 %	51-122	0H06023	EPA 8260B	08/06/10 23:17	JKG	
Dibromofluoromethane	43	1	50.0	87 %	68-117	0H06023	EPA 8260B	08/06/10 23:17	JKG	
Toluene-d8	43	1	50.0	85 %	69-110	0H06023	EPA 8260B	08/06/10 23:17	JKG	

Description: 4103-SMW1

Lab Sample ID: C009061-01

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/02/10 13:40

Work Order: C009061

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/10/10 12:01	VLO	
Arsenic [7440-38-2] ^	4.07	J	ug/L	1	2.80	10.0	10	EPA 6010C	08/10/10 14:32	JDH	
Barium [7440-39-3] ^	144		ug/L	1	1.00	10.0	100	EPA 6010C	08/10/10 14:32	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/10/10 14:32	JDH	
Cadmium [7440-43-9] ^	1.78		ug/L	1	0.360	1.00	1	EPA 6010C	08/10/10 14:32	JDH	
Chromium [7440-47-3] ^	2.06	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/10/10 14:32	JDH	
Cobalt [7440-48-4] ^	15.5		ug/L	1	1.10	10.0	10	EPA 6010C	08/10/10 14:32	JDH	
Copper [7440-50-8] ^	11.9		ug/L	1	1.60	10.0	10	EPA 6010C	08/10/10 14:32	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/10/10 14:32	JDH	
Nickel [7440-02-0] ^	1.86	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/10/10 14:32	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	08/10/10 12:01	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/10/10 14:32	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/10/10 12:01	VLO	
Vanadium [7440-62-2] ^	9.30	J	ug/L	1	1.40	10.0	25	EPA 6010C	08/10/10 14:32	JDH	
Zinc [7440-66-6] ^	96.8		ug/L	1	3.80	10.0	10	EPA 6010C	08/10/10 14:32	JDH	

Description: 4103-SMW3

Lab Sample ID: C009061-02

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/02/10 12:40

Work Order: C009061

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 22:16	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.33	U	ug/L	1	0.33	1.0	3	EPA 8260B	08/06/10 22:16	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
1,1-Dichloroethane [75-34-3] ^	4.2	J	ug/L	1	0.33	1.0	5	EPA 8260B	08/06/10 22:16	JKG	
1,1-Dichloroethene [75-35-4] ^	0.24	U	ug/L	1	0.24	1.0	5	EPA 8260B	08/06/10 22:16	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/06/10 22:16	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.27	U	ug/L	1	0.27	1.0	5	EPA 8260B	08/06/10 22:16	JKG	
1,2-Dichloroethane [107-06-2] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
1,2-Dichloropropane [78-87-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	08/06/10 22:16	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	08/06/10 22:16	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/06/10 22:16	JKG	
Acetone [67-64-1] ^	3.0	J	ug/L	1	1.5	5.0	100	EPA 8260B	08/06/10 22:16	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	08/06/10 22:16	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
Bromochloromethane [74-97-5] ^	0.42	U	ug/L	1	0.42	1.0	3	EPA 8260B	08/06/10 22:16	JKG	
Bromodichloromethane [75-27-4] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
Bromoform [75-25-2] ^	0.71	U	ug/L	1	0.71	1.0	3	EPA 8260B	08/06/10 22:16	JKG	
Bromomethane [74-83-9] ^	0.49	U	ug/L	1	0.49	1.0	10	EPA 8260B	08/06/10 22:16	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	08/06/10 22:16	JKG	
Carbon tetrachloride [56-23-5] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
Chlorobenzene [108-90-7] ^	0.27	U	ug/L	1	0.27	1.0	3	EPA 8260B	08/06/10 22:16	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	08/06/10 22:16	JKG	
Chloroform [67-66-3] ^	0.20	U	ug/L	1	0.20	1.0	5	EPA 8260B	08/06/10 22:16	JKG	
Chloromethane [74-87-3] ^	0.44	J	ug/L	1	0.34	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	6.9		ug/L	1	0.36	1.0	5	EPA 8260B	08/06/10 22:16	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
Dibromochloromethane [124-48-1] ^	0.32	U	ug/L	1	0.32	1.0	3	EPA 8260B	08/06/10 22:16	JKG	
Dibromomethane [74-95-3] ^	0.37	U	ug/L	1	0.37	1.0	10	EPA 8260B	08/06/10 22:16	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	08/06/10 22:16	JKG	
Methylene chloride [75-09-2] ^	0.53	U	ug/L	1	0.53	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
Styrene [100-42-5] ^	0.26	U	ug/L	1	0.26	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
Tetrachloroethene [127-18-4] ^	0.36	U	ug/L	1	0.36	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/06/10 22:16	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	08/06/10 22:16	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
Trichlorofluoromethane [75-69-4] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	08/06/10 22:16	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	08/06/10 22:16	JKG	
Vinyl chloride [75-01-4] ^	0.49	J	ug/L	1	0.30	1.0	1	EPA 8260B	08/06/10 22:16	JKG	

Description: 4103-SMW3

Lab Sample ID: C009061-02

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/02/10 12:40

Work Order: C009061

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 22:16	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	41	1	50.0	82 %	51-122	0H06023	EPA 8260B	08/06/10 22:16	JKG		
Dibromofluoromethane	43	1	50.0	85 %	68-117	0H06023	EPA 8260B	08/06/10 22:16	JKG		
Toluene-d8	43	1	50.0	85 %	69-110	0H06023	EPA 8260B	08/06/10 22:16	JKG		



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Description: 4103-SMW3

Matrix: Ground Water

Project: White Street Landfill App Is (SMWs)

Lab Sample ID: C009061-02

Sampled: 08/02/10 12:40

Sampled By: Gary Simcox

Received: 08/04/10 11:15

Work Order: C009061

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/10/10 12:04	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/10/10 14:35	JDH	
Barium [7440-39-3] ^	228		ug/L	1	1.00	10.0	100	EPA 6010C	08/10/10 14:35	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/10/10 14:35	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/10/10 14:35	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/10/10 14:35	JDH	
Cobalt [7440-48-4] ^	3.12	J	ug/L	1	1.10	10.0	10	EPA 6010C	08/10/10 14:35	JDH	
Copper [7440-50-8] ^	1.66	J	ug/L	1	1.60	10.0	10	EPA 6010C	08/10/10 14:35	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/10/10 14:35	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/10/10 14:35	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	08/10/10 12:04	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/10/10 14:35	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/10/10 12:04	VLO	
Vanadium [7440-62-2] ^	3.15	J	ug/L	1	1.40	10.0	25	EPA 6010C	08/10/10 14:35	JDH	
Zinc [7440-66-6] ^	5.90	J	ug/L	1	3.80	10.0	10	EPA 6010C	08/10/10 14:35	JDH	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

Description: 4103-SMW4

Lab Sample ID: C009061-03

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/02/10 11:30

Work Order: C009061

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 22:47	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.33	U	ug/L	1	0.33	1.0	3	EPA 8260B	08/06/10 22:47	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
1,1-Dichloroethane [75-34-3] ^	0.33	U	ug/L	1	0.33	1.0	5	EPA 8260B	08/06/10 22:47	JKG	
1,1-Dichloroethene [75-35-4] ^	0.24	U	ug/L	1	0.24	1.0	5	EPA 8260B	08/06/10 22:47	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/06/10 22:47	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.27	U	ug/L	1	0.27	1.0	5	EPA 8260B	08/06/10 22:47	JKG	
1,2-Dichloroethane [107-06-2] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
1,2-Dichloropropane [78-87-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	08/06/10 22:47	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	08/06/10 22:47	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/06/10 22:47	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/06/10 22:47	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	08/06/10 22:47	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
Bromochloromethane [74-97-5] ^	0.42	U	ug/L	1	0.42	1.0	3	EPA 8260B	08/06/10 22:47	JKG	
Bromodichloromethane [75-27-4] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
Bromoform [75-25-2] ^	0.71	U	ug/L	1	0.71	1.0	3	EPA 8260B	08/06/10 22:47	JKG	
Bromomethane [74-83-9] ^	0.49	U	ug/L	1	0.49	1.0	10	EPA 8260B	08/06/10 22:47	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	08/06/10 22:47	JKG	
Carbon tetrachloride [56-23-5] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
Chlorobenzene [108-90-7] ^	0.27	U	ug/L	1	0.27	1.0	3	EPA 8260B	08/06/10 22:47	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	08/06/10 22:47	JKG	
Chloroform [67-66-3] ^	0.20	U	ug/L	1	0.20	1.0	5	EPA 8260B	08/06/10 22:47	JKG	
Chloromethane [74-87-3] ^	0.34	U	ug/L	1	0.34	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	08/06/10 22:47	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
Dibromochloromethane [124-48-1] ^	0.32	U	ug/L	1	0.32	1.0	3	EPA 8260B	08/06/10 22:47	JKG	
Dibromomethane [74-95-3] ^	0.37	U	ug/L	1	0.37	1.0	10	EPA 8260B	08/06/10 22:47	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	08/06/10 22:47	JKG	
Methylene chloride [75-09-2] ^	0.53	U	ug/L	1	0.53	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
Styrene [100-42-5] ^	0.26	U	ug/L	1	0.26	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
Tetrachloroethene [127-18-4] ^	0.36	U	ug/L	1	0.36	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/06/10 22:47	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	08/06/10 22:47	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
Trichlorofluoromethane [75-69-4] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	08/06/10 22:47	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	08/06/10 22:47	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	08/06/10 22:47	JKG	

Description: 4103-SMW4

Lab Sample ID: C009061-03

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/02/10 11:30

Work Order: C009061

Project: White Street Landfill App 1s (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 22:47	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	41	1	50.0	83 %	51-122	0H06023	EPA 8260B	08/06/10 22:47	JKG		
Dibromofluoromethane	43	1	50.0	85 %	68-117	0H06023	EPA 8260B	08/06/10 22:47	JKG		
Toluene-d8	43	1	50.0	86 %	69-110	0H06023	EPA 8260B	08/06/10 22:47	JKG		

Description: 4103-SMW4

Lab Sample ID: C009061-03

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/02/10 11:30

Work Order: C009061

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/10/10 12:08	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/10/10 14:38	JDH	
Barium [7440-39-3] ^	178		ug/L	1	1.00	10.0	100	EPA 6010C	08/10/10 14:38	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/10/10 14:38	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/10/10 14:38	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/10/10 14:38	JDH	
Cobalt [7440-48-4] ^	4.55	J	ug/L	1	1.10	10.0	10	EPA 6010C	08/10/10 14:38	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/10/10 14:38	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/10/10 14:38	JDH	
Nickel [7440-02-0] ^	4.28	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/10/10 14:38	JDH	
Selenium [7782-49-2] ^	9.47	J	ug/L	1	0.830	1.00	10	EPA 6020A	08/10/10 12:08	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/10/10 14:38	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/10/10 12:08	VLO	
Vanadium [7440-62-2] ^	2.14	J	ug/L	1	1.40	10.0	25	EPA 6010C	08/10/10 14:38	JDH	
Zinc [7440-66-6] ^	7.60	J	ug/L	1	3.80	10.0	10	EPA 6010C	08/10/10 14:38	JDH	

Description: 4103-TripBlank

Lab Sample ID: C009061-04

Received: 08/04/10 11:15

Matrix: Water

Sampled: 08/02/10 11:30

Work Order: C009061

Project: White Street Landfill App Is (SMWs)

Sampled By: ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 21:46	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.33	U	ug/L	1	0.33	1.0	3	EPA 8260B	08/06/10 21:46	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
1,1-Dichloroethane [75-34-3] ^	0.33	U	ug/L	1	0.33	1.0	5	EPA 8260B	08/06/10 21:46	JKG	
1,1-Dichloroethene [75-35-4] ^	0.24	U	ug/L	1	0.24	1.0	5	EPA 8260B	08/06/10 21:46	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/06/10 21:46	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.27	U	ug/L	1	0.27	1.0	5	EPA 8260B	08/06/10 21:46	JKG	
1,2-Dichloroethane [107-06-2] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
1,2-Dichloropropane [78-87-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	08/06/10 21:46	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	08/06/10 21:46	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/06/10 21:46	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/06/10 21:46	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	08/06/10 21:46	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
Bromochloromethane [74-97-5] ^	0.42	U	ug/L	1	0.42	1.0	3	EPA 8260B	08/06/10 21:46	JKG	
Bromodichloromethane [75-27-4] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
Bromoform [75-25-2] ^	0.71	U	ug/L	1	0.71	1.0	3	EPA 8260B	08/06/10 21:46	JKG	
Bromomethane [74-83-9] ^	0.49	U	ug/L	1	0.49	1.0	10	EPA 8260B	08/06/10 21:46	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	08/06/10 21:46	JKG	
Carbon tetrachloride [56-23-5] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
Chlorobenzene [108-90-7] ^	0.27	U	ug/L	1	0.27	1.0	3	EPA 8260B	08/06/10 21:46	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	08/06/10 21:46	JKG	
Chloroform [67-66-3] ^	0.20	U	ug/L	1	0.20	1.0	5	EPA 8260B	08/06/10 21:46	JKG	
Chloromethane [74-87-3] ^	0.34	U	ug/L	1	0.34	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	08/06/10 21:46	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
Dibromochloromethane [124-48-1] ^	0.32	U	ug/L	1	0.32	1.0	3	EPA 8260B	08/06/10 21:46	JKG	
Dibromomethane [74-95-3] ^	0.37	U	ug/L	1	0.37	1.0	10	EPA 8260B	08/06/10 21:46	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	08/06/10 21:46	JKG	
Methylene chloride [75-09-2] ^	0.53	U	ug/L	1	0.53	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
Styrene [100-42-5] ^	0.26	U	ug/L	1	0.26	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
Tetrachloroethene [127-18-4] ^	0.36	U	ug/L	1	0.36	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/06/10 21:46	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	08/06/10 21:46	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
Trichlorofluoromethane [75-69-4] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	08/06/10 21:46	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	08/06/10 21:46	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	08/06/10 21:46	JKG	



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Description: 4103-TripBlank

Lab Sample ID: C009061-04

Received: 08/04/10 11:15

Matrix: Water

Sampled: 08/02/10 11:30

Work Order: C009061

Project: White Street Landfill App Is (SMWs)

Sampled By: ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 21:46	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	41	1	50.0	83 %	51-122	0H06023	EPA 8260B	08/06/10 21:46	JKG		
Dibromofluoromethane	40	1	50.0	81 %	68-117	0H06023	EPA 8260B	08/06/10 21:46	JKG		
Toluene-d8	41	1	50.0	83 %	69-110	0H06023	EPA 8260B	08/06/10 21:46	JKG		

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 0H06023 - EPA 5030B_MS

Blank (0H06023-BLK1)

Prepared: 08/06/2010 11:29 Analyzed: 08/06/2010 14:06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.40	U	1.0	ug/L							
1,1,1-Trichloroethane	0.27	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.33	U	1.0	ug/L							
1,1,2-Trichloroethane	0.37	U	1.0	ug/L							
1,1-Dichloroethane	0.33	U	1.0	ug/L							
1,1-Dichloroethene	0.24	U	1.0	ug/L							
1,2,3-Trichloropropane	0.55	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.42	U	1.0	ug/L							
1,2-Dichlorobenzene	0.27	U	1.0	ug/L							
1,2-Dichloroethane	0.65	U	1.0	ug/L							
1,2-Dichloropropane	0.20	U	1.0	ug/L							
1,4-Dichlorobenzene	0.38	U	1.0	ug/L							
2-Butanone	1.0	U	5.0	ug/L							
2-Hexanone	0.69	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.5	U	5.0	ug/L							
Acrylonitrile	2.1	U	10	ug/L							
Benzene	0.20	U	1.0	ug/L							
Bromochloromethane	0.42	U	1.0	ug/L							
Bromodichloromethane	0.37	U	1.0	ug/L							
Bromoform	0.71	U	1.0	ug/L							
Bromomethane	0.49	U	1.0	ug/L							
Carbon disulfide	0.54	U	5.0	ug/L							
Carbon tetrachloride	0.38	U	1.0	ug/L							
Chlorobenzene	0.27	U	1.0	ug/L							
Chloroethane	0.30	U	1.0	ug/L							
Chloroform	0.20	U	1.0	ug/L							
Chloromethane	0.34	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.36	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.28	U	1.0	ug/L							
Dibromochloromethane	0.32	U	1.0	ug/L							
Dibromomethane	0.37	U	1.0	ug/L							
Ethylbenzene	0.20	U	1.0	ug/L							
Iodomethane	0.52	U	5.0	ug/L							
Methylene chloride	0.53	U	1.0	ug/L							
Styrene	0.26	U	1.0	ug/L							
Tetrachloroethene	0.36	U	1.0	ug/L							
Toluene	0.27	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.34	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.38	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.54	U	1.0	ug/L							
Trichloroethene	0.38	U	1.0	ug/L							
Trichlorofluoromethane	0.28	U	1.0	ug/L							
Vinyl acetate	0.98	U	5.0	ug/L							
Vinyl chloride	0.30	U	1.0	ug/L							
Xylenes (Total)	0.40	U	1.0	ug/L							
Surrogate: 4-Bromofluorobenzene	41			ug/L	50.0		82	51-122			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 0H06023 - EPA 5030B_MS

Blank (0H06023-BLK1) Continued

Prepared: 08/06/2010 11:29 Analyzed: 08/06/2010 14:06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	43			ug/L	50.0		86	68-117			
Surrogate: Toluene-d8	42			ug/L	50.0		83	69-110			

LCS (0H06023-BS1)

Prepared: 08/06/2010 11:29 Analyzed: 08/06/2010 14:38

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0		113	75-133			
Benzene	21		1.0	ug/L	20.0		106	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		102	83-117			
Toluene	21		1.0	ug/L	20.0		103	71-118			
Trichloroethene	20		1.0	ug/L	20.0		99	75-115			

Matrix Spike (0H06023-MS1)

Prepared: 08/06/2010 11:29 Analyzed: 08/06/2010 15:11

Source: C009177-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.24 U	111	75-133			
Benzene	22		1.0	ug/L	20.0	0.20 U	108	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.27 U	104	83-117			
Toluene	21		1.0	ug/L	20.0	0.27 U	104	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.38 U	99	75-115			

Matrix Spike Dup (0H06023-MSD1)

Prepared: 08/06/2010 11:29 Analyzed: 08/06/2010 15:41

Source: C009177-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.24 U	112	75-133	0.5	20	
Benzene	22		1.0	ug/L	20.0	0.20 U	108	81-134	0.4	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.27 U	100	83-117	4	16	
Toluene	21		1.0	ug/L	20.0	0.27 U	104	71-118	0.6	17	
Trichloroethene	19		1.0	ug/L	20.0	0.38 U	97	75-115	2	18	

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 0H05016 - EPA 3005A

Blank (0H05016-BLK1)

Prepared: 08/05/2010 09:48 Analyzed: 08/10/2010 12:26

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 0H05016 - EPA 3005A

Blank (0H05016-BLK1) Continued

Prepared: 08/05/2010 09:48 Analyzed: 08/10/2010 12:26

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (0H05016-BS1)

Prepared: 08/05/2010 09:48 Analyzed: 08/10/2010 12:30

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	529		10.0	ug/L	500		106	80-120			
Barium	520		10.0	ug/L	500		104	80-120			
Beryllium	270		1.00	ug/L	250		108	80-120			
Cadmium	259		1.00	ug/L	250		104	80-120			
Chromium	516		10.0	ug/L	500		103	80-120			
Cobalt	520		10.0	ug/L	500		104	80-120			
Copper	260		10.0	ug/L	250		104	80-120			
Lead	533		10.0	ug/L	500		107	80-120			
Nickel	526		10.0	ug/L	500		105	80-120			
Silver	260		10.0	ug/L	250		104	80-120			
Vanadium	252		10.0	ug/L	250		101	80-120			
Zinc	529		10.0	ug/L	500		106	80-120			

Matrix Spike (0H05016-MS1)

Prepared: 08/05/2010 09:48 Analyzed: 08/10/2010 12:42

Source: C008622-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	566		10.0	ug/L	500	2.80 U	113	75-125			
Barium	560		10.0	ug/L	500	19.1	108	75-125			
Beryllium	278		1.00	ug/L	250	0.100 U	111	75-125			
Cadmium	265		1.00	ug/L	250	0.360 U	106	75-125			
Chromium	526		10.0	ug/L	500	1.00 U	105	75-125			
Cobalt	555		10.0	ug/L	500	1.10 U	111	75-125			
Copper	270		10.0	ug/L	250	1.60 U	108	75-125			
Lead	565		10.0	ug/L	500	1.90 U	113	75-125			
Nickel	535		10.0	ug/L	500	1.80 U	107	75-125			
Silver	266		10.0	ug/L	250	1.90 U	107	75-125			
Vanadium	261		10.0	ug/L	250	1.40 U	104	75-125			
Zinc	559		10.0	ug/L	500	14.7	109	75-125			

Matrix Spike Dup (0H05016-MSD1)

Prepared: 08/05/2010 09:48 Analyzed: 08/10/2010 12:57

Source: C008622-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	577		10.0	ug/L	500	2.80 U	115	75-125	2	20	
Barium	596		10.0	ug/L	500	19.1	115	75-125	6	20	
Beryllium	296		1.00	ug/L	250	0.100 U	119	75-125	7	20	
Cadmium	282		1.00	ug/L	250	0.360 U	113	75-125	6	20	
Chromium	559		10.0	ug/L	500	1.00 U	112	75-125	6	20	
Cobalt	569		10.0	ug/L	500	1.10 U	114	75-125	3	20	

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 0H05016 - EPA 3005A

Matrix Spike Dup (0H05016-MSD1) Continued

Prepared: 08/05/2010 09:48 Analyzed: 08/10/2010 12:57

Source: C008622-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Copper	285		10.0	ug/L	250	1.60 U	114	75-125	6	20	
Lead	579		10.0	ug/L	500	1.90 U	116	75-125	2	20	
Nickel	570		10.0	ug/L	500	1.80 U	114	75-125	6	20	
Silver	282		10.0	ug/L	250	1.90 U	113	75-125	6	20	
Vanadium	278		10.0	ug/L	250	1.40 U	111	75-125	6	20	
Zinc	597		10.0	ug/L	500	14.7	116	75-125	7	20	

Post Spike (0H05016-PS1)

Prepared: 08/05/2010 09:48 Analyzed: 08/10/2010 12:59

Source: C008622-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	1.19		0.0100	mg/L	1.00	-0.000227	119	80-120			
Barium	1.22		0.0100	mg/L	1.00	0.0191	120	80-120			
Beryllium	0.620		0.00100	mg/L	0.500	-4.06E-5	124	80-120			QM-08
Cadmium	0.590		0.00100	mg/L	0.500	0.000129	118	80-120			
Chromium	1.18		0.0100	mg/L	1.00	-2.91E-5	118	80-120			
Cobalt	1.15		0.0100	mg/L	1.00	9.72E-5	115	80-120			
Copper	0.606		0.0100	mg/L	0.500	0.000452	121	80-120			QM-08
Lead	1.18		0.0100	mg/L	1.00	-0.00120	119	80-120			
Nickel	1.18		0.0100	mg/L	1.00	-0.000630	118	80-120			
Silver	0.549		0.0100	mg/L	0.500	0.000633	110	80-120			
Vanadium	0.587		0.0100	mg/L	0.500	0.000491	117	80-120			
Zinc	1.22		0.0100	mg/L	1.00	0.0147	121	80-120			QM-08

Batch 0H05032 - EPA 3005A

Blank (0H05032-BLK1)

Prepared: 08/05/2010 14:22 Analyzed: 08/10/2010 11:06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (0H05032-BS1)

Prepared: 08/05/2010 14:22 Analyzed: 08/10/2010 11:17

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.5		2.00	ug/L	25.0		102	80-120			
Selenium	26.7		1.00	ug/L	25.0		107	80-120			
Thallium	26.5		1.00	ug/L	25.0		106	80-120			

Matrix Spike (0H05032-MS1)

Prepared: 08/05/2010 14:22 Analyzed: 08/10/2010 11:24

Source: C009071-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.8		2.00	ug/L	25.0	0.475	101	75-125			
Selenium	26.3		1.00	ug/L	25.0	0.830 U	105	75-125			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 0H05032 - EPA 3005A

Matrix Spike (0H05032-MS1) Continued

Prepared: 08/05/2010 14:22 Analyzed: 08/10/2010 11:24

Source: C009071-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Thallium	25.8		1.00	ug/L	25.0	0.110 U	103	75-125			

Matrix Spike Dup (0H05032-MSD1)

Prepared: 08/05/2010 14:22 Analyzed: 08/10/2010 11:28

Source: C009071-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.6		2.00	ug/L	25.0	0.475	101	75-125	0.7	20	
Selenium	25.6		1.00	ug/L	25.0	0.830 U	102	75-125	3	20	
Thallium	25.6		1.00	ug/L	25.0	0.110 U	103	75-125	0.8	20	

Post Spike (0H05032-PS1)

Prepared: 08/05/2010 14:22 Analyzed: 08/10/2010 11:31

Source: C009071-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	28.0		2.00	ug/L	25.0	0.475	110	80-120			
Selenium	28.9		1.00	ug/L	25.0	-0.0110	116	80-120			
Thallium	27.5		1.00	ug/L	25.0	0.0110	110	80-120			

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
QM-08	Post-digestion spike did not meet method requirements due to confirmed matrix effects (dilution test).

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10000 Woodlands Industrial Ct
 Cary, NC 27511
 (919) 467-5900 Fax: (919) 467-5975

Page 1 of 1

Client Name S&ME, Inc. (SM004)		Project Number [none]		Requested Analysis 8260B Appendix 1		Requested Turnaround Times Note: This request is subject to acceptance by the facility. Standard Expedited Due _____ Lab Workorder C009061	
Address 3718 Old Battleground Rd. Greensboro, NC 27410		Project Name/Year White Street Landfill App Is (SMWIs) PDI a. No. no info		Preservation (See Container Comments if necessary)		Sample Comments	
City/State/Zip Greensboro, NC 27410		Reporting Contact Connel Ware		Matrix (See Labels)		Total # of Containers	
Phone (336) 288-7780 Fax: (336) 288-8980		Reporting Contact Connel Ware		Comp. Cont.		Collection Date	
Sample Origin (Name, Address, Phone) GAM Simcox / SIME Sample Origin: [Signature]		Account Payable SIME		Collection Date		Collection Date	
Sample ID: 4103-SMW1		Collection Date: 8/2/10		Matrix: GW		Total # of Containers: 4	
Sample ID: 4103-SMW3		Collection Date: 8/2/10		Matrix: GW		Total # of Containers: 4	
Sample ID: 4103-SMW4		Collection Date: 8/2/10		Matrix: GW		Total # of Containers: 4	
Sample ID: 4103-TripBlank		Collection Date:		Matrix: GW		Total # of Containers: 2	
Sample ID Prepared By JK		Date 7-29-10		Relinquished By [Signature]		Relinquished Date 8/4/10 0700	
Comments (Special Handling Requirements)		Relinquished By [Signature]		Relinquished Date 8/4/10 11:15		Relinquished Time 8:40 9:30	
Mix GW-Gravelwater SO Soil GW-Drinking Water		SE-Gravelwater SW-Gravelwater A-A-Other (Initial in comments)		Preservation Like: H-HCl M-MeOH S-HClS4 NO-NH4H O-Other (Initial in comments)		Condition Upon Receipt X Acceptable Unacceptable	



Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090 FAX: 919.467.3515



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Wednesday, October 27, 2010

S&ME, Inc. (SM004)

Attn: Edmund Henriques

3718 Old Battleground Rd.

Greensboro, NC 27410

RE: Laboratory Results for

Project Number: [none], Project Name/Desc: White Street Landfill App Is (SMWs)

ENCO Workorder: C011803

Dear Edmund Henriques,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Tuesday, October 12, 2010.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith". The signature is written in a cursive, flowing style with a large initial "C" and a stylized "S".

Chuck Smith

Project Manager

Enclosure(s)

PROJECT NARRATIVE

Client: S&ME, Inc. (SM004)
Project: White Street Landfill App Is (SMWs)
Lab ID: C011803

Overview

Environmental Conservation Laboratories, Inc. (ENCO) analyzed all submitted samples in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling by ENCO are discussed in the QC Remarks section below.

Quality Control Samples

No Comments

Quality Control Remarks

The detection of Chloromethane in sample 4103-SMW3 has been determined to be a laboratory artifact caused by contaminant buildup in one component in the 8260B instrumentation. The contaminated part has been replaced and systems are being developed to prevent future occurrences.

Other Comments

The analytical data presented in this report are consistent with the methods as referenced in the analytical report. Any exceptions or deviations are noted in the QC remarks section of this narrative or in the Flags/Notes and Definitions section of the report.

Released By:
Environmental Conservation Laboratories, Inc.

Chuck Smith
Project Manager

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 4103-SMW1		Lab ID: C011803-01		Sampled: 10/11/10 16:00		Received: 10/12/10 14:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 6010C	04/09/11	10/13/10	10:21	10/19/2010 12:57			
EPA 6020A	04/09/11	10/13/10	10:25	10/26/2010 11:32			
EPA 8260B	10/25/10	10/16/10	14:08	10/18/2010 11:08			

Client ID: 4103-SHW3		Lab ID: C011803-02		Sampled: 10/11/10 14:55		Received: 10/12/10 14:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 6010C	04/09/11	10/13/10	10:21	10/19/2010 14:00			
EPA 6020A	04/09/11	10/13/10	10:25	10/26/2010 11:35			
EPA 8260B	10/25/10	10/16/10	14:08	10/18/2010 11:36			

Client ID: 4103-SHW4		Lab ID: C011803-03		Sampled: 10/11/10 13:35		Received: 10/12/10 14:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 6010C	04/09/11	10/13/10	10:21	10/19/2010 14:03			
EPA 6020A	04/09/11	10/13/10	10:25	10/26/2010 11:39			
EPA 8260B	10/25/10	10/18/10	11:19	10/19/2010 04:06			

Client ID: 4103-TripBlank		Lab ID: C011803-04		Sampled: 10/11/10 13:35		Received: 10/12/10 14:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 8260B	10/25/10	10/18/10	11:19	10/19/2010 04:35			

NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 4103-SHW1				Lab ID: C011803-01					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetone	1.5	J	1	1.5	5.0	100	ug/L	EPA 8260B	
Barium - Total	140		1	1.00	10.0	100	ug/L	EPA 6010C	
Cadmium - Total	4.79		1	0.360	1.00	1	ug/L	EPA 6010C	
Chromium - Total	6.52	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	7.34	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	18.1		1	1.60	10.0	10	ug/L	EPA 6010C	
Lead - Total	3.42	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	3.75	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	18.1	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	409		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 4103-SHW3				Lab ID: C011803-02					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	3.8	J	1	0.33	1.0	5	ug/L	EPA 8260B	
Barium - Total	301		1	1.00	10.0	100	ug/L	EPA 6010C	
Chloromethane	0.61	J	1	0.34	1.0	1	ug/L	EPA 8260B	
Chromium - Total	7.86	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	7.8		1	0.36	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	13.0		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	72.0		1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	5.57	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	56.6		1	1.40	10.0	25	ug/L	EPA 6010C	
Vinyl chloride	0.68	J	1	0.30	1.0	1	ug/L	EPA 8260B	
Zinc - Total	35.4		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 4103-SHW4				Lab ID: C011803-03					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	164		1	1.00	10.0	100	ug/L	EPA 6010C	
Cobalt - Total	1.48	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	2.35	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	4.15	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Selenium - Total	5.30	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Vanadium - Total	2.65	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	8.07	J	1	3.80	10.0	10	ug/L	EPA 6010C	

ANALYTICAL RESULTS

Description: 4103-SMW1

Lab Sample ID: C011803-01

Received: 10/12/10 14:00

Matrix: Ground Water

Sampled: 10/11/10 16:00

Work Order: C011803

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	10/18/10 11:08	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.33	U	ug/L	1	0.33	1.0	3	EPA 8260B	10/18/10 11:08	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
1,1-Dichloroethane [75-34-3] ^	0.33	U	ug/L	1	0.33	1.0	5	EPA 8260B	10/18/10 11:08	JKG	
1,1-Dichloroethene [75-35-4] ^	0.24	U	ug/L	1	0.24	1.0	5	EPA 8260B	10/18/10 11:08	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/10 11:08	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.27	U	ug/L	1	0.27	1.0	5	EPA 8260B	10/18/10 11:08	JKG	
1,2-Dichloroethane [107-06-2] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
1,2-Dichloropropane [78-87-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	10/18/10 11:08	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	10/18/10 11:08	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/10 11:08	JKG	
Acetone [67-64-1] ^	1.5	J	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/10 11:08	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	10/18/10 11:08	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
Bromochloromethane [74-97-5] ^	0.42	U	ug/L	1	0.42	1.0	3	EPA 8260B	10/18/10 11:08	JKG	
Bromodichloromethane [75-27-4] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
Bromoform [75-25-2] ^	0.71	U	ug/L	1	0.71	1.0	3	EPA 8260B	10/18/10 11:08	JKG	
Bromomethane [74-83-9] ^	0.49	U	ug/L	1	0.49	1.0	10	EPA 8260B	10/18/10 11:08	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	10/18/10 11:08	JKG	
Carbon tetrachloride [56-23-5] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
Chlorobenzene [108-90-7] ^	0.27	U	ug/L	1	0.27	1.0	3	EPA 8260B	10/18/10 11:08	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	10/18/10 11:08	JKG	
Chloroform [67-66-3] ^	0.20	U	ug/L	1	0.20	1.0	5	EPA 8260B	10/18/10 11:08	JKG	
Chloromethane [74-87-3] ^	0.34	U	ug/L	1	0.34	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	10/18/10 11:08	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
Dibromochloromethane [124-48-1] ^	0.32	U	ug/L	1	0.32	1.0	3	EPA 8260B	10/18/10 11:08	JKG	
Dibromomethane [74-95-3] ^	0.37	U	ug/L	1	0.37	1.0	10	EPA 8260B	10/18/10 11:08	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	10/18/10 11:08	JKG	
Methylene chloride [75-09-2] ^	0.53	U	ug/L	1	0.53	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
Styrene [100-42-5] ^	0.26	U	ug/L	1	0.26	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
Tetrachloroethene [127-18-4] ^	0.36	U	ug/L	1	0.36	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	10/18/10 11:08	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	10/18/10 11:08	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/18/10 11:08	JKG	



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Description: 4103-SMW1

Lab Sample ID: C011803-01

Received: 10/12/10 14:00

Matrix: Ground Water

Sampled: 10/11/10 16:00

Work Order: C011803

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte (NC 591)

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Trichlorofluoromethane [75-69-4] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	10/18/10 11:08	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	10/18/10 11:08	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	10/18/10 11:08	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	49	1	50.0	99 %	51-122	0J16007	EPA 8260B	10/18/10 11:08	JKG		
Dibromofluoromethane	49	1	50.0	98 %	68-117	0J16007	EPA 8260B	10/18/10 11:08	JKG		
Toluene-d8	50	1	50.0	101 %	69-110	0J16007	EPA 8260B	10/18/10 11:08	JKG		

Description: 4103-SMW1

Lab Sample ID: C011803-01

Received: 10/12/10 14:00

Matrix: Ground Water

Sampled: 10/11/10 16:00

Work Order: C011803

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/26/10 11:32	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/19/10 12:57	JDH	
Barium [7440-39-3] ^	140		ug/L	1	1.00	10.0	100	EPA 6010C	10/19/10 12:57	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/19/10 12:57	JDH	
Cadmium [7440-43-9] ^	4.79		ug/L	1	0.360	1.00	1	EPA 6010C	10/19/10 12:57	JDH	
Chromium [7440-47-3] ^	6.52	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/19/10 12:57	JDH	
Cobalt [7440-48-4] ^	7.34	J	ug/L	1	1.10	10.0	10	EPA 6010C	10/19/10 12:57	JDH	
Copper [7440-50-8] ^	18.1		ug/L	1	1.60	10.0	10	EPA 6010C	10/19/10 12:57	JDH	
Lead [7439-92-1] ^	3.42	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/19/10 12:57	JDH	
Nickel [7440-02-0] ^	3.75	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/19/10 12:57	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/26/10 11:32	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/19/10 12:57	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/26/10 11:32	VLO	
Vanadium [7440-62-2] ^	18.1	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/19/10 12:57	JDH	
Zinc [7440-66-6] ^	409		ug/L	1	3.80	10.0	10	EPA 6010C	10/19/10 12:57	JDH	

Description: 4103-SMW3

Lab Sample ID: C011803-02

Received: 10/12/10 14:00

Matrix: Ground Water

Sampled: 10/11/10 14:55

Work Order: C011803

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	10/18/10 11:36	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.33	U	ug/L	1	0.33	1.0	3	EPA 8260B	10/18/10 11:36	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
1,1-Dichloroethane [75-34-3] ^	3.8	J	ug/L	1	0.33	1.0	5	EPA 8260B	10/18/10 11:36	JKG	
1,1-Dichloroethene [75-35-4] ^	0.24	U	ug/L	1	0.24	1.0	5	EPA 8260B	10/18/10 11:36	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/10 11:36	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.27	U	ug/L	1	0.27	1.0	5	EPA 8260B	10/18/10 11:36	JKG	
1,2-Dichloroethane [107-06-2] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
1,2-Dichloropropane [78-87-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	10/18/10 11:36	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	10/18/10 11:36	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/10 11:36	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/10 11:36	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	10/18/10 11:36	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
Bromochloromethane [74-97-5] ^	0.42	U	ug/L	1	0.42	1.0	3	EPA 8260B	10/18/10 11:36	JKG	
Bromodichloromethane [75-27-4] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
Bromoform [75-25-2] ^	0.71	U	ug/L	1	0.71	1.0	3	EPA 8260B	10/18/10 11:36	JKG	
Bromomethane [74-83-9] ^	0.49	U	ug/L	1	0.49	1.0	10	EPA 8260B	10/18/10 11:36	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	10/18/10 11:36	JKG	
Carbon tetrachloride [56-23-5] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
Chlorobenzene [108-90-7] ^	0.27	U	ug/L	1	0.27	1.0	3	EPA 8260B	10/18/10 11:36	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	10/18/10 11:36	JKG	
Chloroform [67-66-3] ^	0.20	U	ug/L	1	0.20	1.0	5	EPA 8260B	10/18/10 11:36	JKG	
Chloromethane [74-87-3] ^	0.61	J	ug/L	1	0.34	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	7.8		ug/L	1	0.36	1.0	5	EPA 8260B	10/18/10 11:36	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
Dibromochloromethane [124-48-1] ^	0.32	U	ug/L	1	0.32	1.0	3	EPA 8260B	10/18/10 11:36	JKG	
Dibromomethane [74-95-3] ^	0.37	U	ug/L	1	0.37	1.0	10	EPA 8260B	10/18/10 11:36	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	10/18/10 11:36	JKG	
Methylene chloride [75-09-2] ^	0.53	U	ug/L	1	0.53	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
Styrene [100-42-5] ^	0.26	U	ug/L	1	0.26	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
Tetrachloroethene [127-18-4] ^	0.36	U	ug/L	1	0.36	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	10/18/10 11:36	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	10/18/10 11:36	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
Trichlorofluoromethane [75-69-4] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	10/18/10 11:36	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	10/18/10 11:36	JKG	
Vinyl chloride [75-01-4] ^	0.68	J	ug/L	1	0.30	1.0	1	EPA 8260B	10/18/10 11:36	JKG	



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Description: 4103-SMW3

Lab Sample ID: C011803-02

Received: 10/12/10 14:00

Matrix: Ground Water

Sampled: 10/11/10 14:55

Work Order: C011803

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	10/18/10 11:36	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	48	1	50.0	97 %	51-122	0J16007	EPA 8260B	10/18/10 11:36	JKG		
Dibromofluoromethane	48	1	50.0	97 %	68-117	0J16007	EPA 8260B	10/18/10 11:36	JKG		
Toluene-d8	48	1	50.0	96 %	69-110	0J16007	EPA 8260B	10/18/10 11:36	JKG		

Description: 4103-SMW3

Lab Sample ID: C011803-02

Received: 10/12/10 14:00

Matrix: Ground Water

Sampled: 10/11/10 14:55

Work Order: C011803

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/26/10 11:35	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/19/10 14:00	JDH	
Barium [7440-39-3] ^	301		ug/L	1	1.00	10.0	100	EPA 6010C	10/19/10 14:00	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/19/10 14:00	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/19/10 14:00	JDH	
Chromium [7440-47-3] ^	7.86	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/19/10 14:00	JDH	
Cobalt [7440-48-4] ^	13.0		ug/L	1	1.10	10.0	10	EPA 6010C	10/19/10 14:00	JDH	
Copper [7440-50-8] ^	72.0		ug/L	1	1.60	10.0	10	EPA 6010C	10/19/10 14:00	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/19/10 14:00	JDH	
Nickel [7440-02-0] ^	5.57	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/19/10 14:00	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/26/10 11:35	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/19/10 14:00	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/26/10 11:35	VLO	
Vanadium [7440-62-2] ^	56.6		ug/L	1	1.40	10.0	25	EPA 6010C	10/19/10 14:00	JDH	
Zinc [7440-66-6] ^	35.4		ug/L	1	3.80	10.0	10	EPA 6010C	10/19/10 14:00	JDH	

Description: 4103-SMW4

Lab Sample ID: C011803-03

Received: 10/12/10 14:00

Matrix: Ground Water

Sampled: 10/11/10 13:35

Work Order: C011803

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	10/19/10 04:06	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.33	U	ug/L	1	0.33	1.0	3	EPA 8260B	10/19/10 04:06	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
1,1-Dichloroethane [75-34-3] ^	0.33	U	ug/L	1	0.33	1.0	5	EPA 8260B	10/19/10 04:06	JKG	
1,1-Dichloroethene [75-35-4] ^	0.24	U	ug/L	1	0.24	1.0	5	EPA 8260B	10/19/10 04:06	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/10 04:06	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.27	U	ug/L	1	0.27	1.0	5	EPA 8260B	10/19/10 04:06	JKG	
1,2-Dichloroethane [107-06-2] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
1,2-Dichloropropane [78-87-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	10/19/10 04:06	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	10/19/10 04:06	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/10 04:06	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/10 04:06	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	10/19/10 04:06	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
Bromochloromethane [74-97-5] ^	0.42	U	ug/L	1	0.42	1.0	3	EPA 8260B	10/19/10 04:06	JKG	
Bromodichloromethane [75-27-4] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
Bromoform [75-25-2] ^	0.71	U	ug/L	1	0.71	1.0	3	EPA 8260B	10/19/10 04:06	JKG	
Bromomethane [74-83-9] ^	0.49	U	ug/L	1	0.49	1.0	10	EPA 8260B	10/19/10 04:06	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	10/19/10 04:06	JKG	
Carbon tetrachloride [56-23-5] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
Chlorobenzene [108-90-7] ^	0.27	U	ug/L	1	0.27	1.0	3	EPA 8260B	10/19/10 04:06	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	10/19/10 04:06	JKG	
Chloroform [67-66-3] ^	0.20	U	ug/L	1	0.20	1.0	5	EPA 8260B	10/19/10 04:06	JKG	
Chloromethane [74-87-3] ^	0.34	U	ug/L	1	0.34	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	10/19/10 04:06	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
Dibromochloromethane [124-48-1] ^	0.32	U	ug/L	1	0.32	1.0	3	EPA 8260B	10/19/10 04:06	JKG	
Dibromomethane [74-95-3] ^	0.37	U	ug/L	1	0.37	1.0	10	EPA 8260B	10/19/10 04:06	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	10/19/10 04:06	JKG	
Methylene chloride [75-09-2] ^	0.53	U	ug/L	1	0.53	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
Styrene [100-42-5] ^	0.26	U	ug/L	1	0.26	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
Tetrachloroethene [127-18-4] ^	0.36	U	ug/L	1	0.36	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	10/19/10 04:06	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	10/19/10 04:06	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
Trichlorofluoromethane [75-69-4] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	10/19/10 04:06	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	10/19/10 04:06	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	10/19/10 04:06	JKG	

Description: 4103-SMW4

Lab Sample ID: C011803-03

Received: 10/12/10 14:00

Matrix: Ground Water

Sampled: 10/11/10 13:35

Work Order: C011803

Project: White Street Landfill App 1s (SMWs)

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	10/19/10 04:06	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	50	1	50.0	100 %	51-122	0J18026	EPA 8260B	10/19/10 04:06	JKG		
Dibromofluoromethane	53	1	50.0	107 %	68-117	0J18026	EPA 8260B	10/19/10 04:06	JKG		
Toluene-d8	48	1	50.0	96 %	69-110	0J18026	EPA 8260B	10/19/10 04:06	JKG		

Description: 4103-SMW4

Lab Sample ID: C011803-03

Received: 10/12/10 14:00

Matrix: Ground Water

Sampled: 10/11/10 13:35

Work Order: C011803

Project: White Street Landfill App Is (SMWs)

Sampled By: Gary Simcox

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/26/10 11:39	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/19/10 14:03	JDH	
Barium [7440-39-3] ^	164		ug/L	1	1.00	10.0	100	EPA 6010C	10/19/10 14:03	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/19/10 14:03	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/19/10 14:03	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/19/10 14:03	JDH	
Cobalt [7440-48-4] ^	1.48	J	ug/L	1	1.10	10.0	10	EPA 6010C	10/19/10 14:03	JDH	
Copper [7440-50-8] ^	2.35	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/19/10 14:03	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/19/10 14:03	JDH	
Nickel [7440-02-0] ^	4.15	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/19/10 14:03	JDH	
Selenium [7782-49-2] ^	5.30	J	ug/L	1	0.830	1.00	10	EPA 6020A	10/26/10 11:39	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/19/10 14:03	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/26/10 11:39	VLO	
Vanadium [7440-62-2] ^	2.65	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/19/10 14:03	JDH	
Zinc [7440-66-6] ^	8.07	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/19/10 14:03	JDH	

Description: 4103-TripBlank

Lab Sample ID: C011803-04

Received: 10/12/10 14:00

Matrix: Water

Sampled: 10/11/10 13:35

Work Order: C011803

Project: White Street Landfill App Is (SMWs)

Sampled By: ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	10/19/10 04:35	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.33	U	ug/L	1	0.33	1.0	3	EPA 8260B	10/19/10 04:35	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
1,1-Dichloroethane [75-34-3] ^	0.33	U	ug/L	1	0.33	1.0	5	EPA 8260B	10/19/10 04:35	JKG	
1,1-Dichloroethene [75-35-4] ^	0.24	U	ug/L	1	0.24	1.0	5	EPA 8260B	10/19/10 04:35	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/10 04:35	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.27	U	ug/L	1	0.27	1.0	5	EPA 8260B	10/19/10 04:35	JKG	
1,2-Dichloroethane [107-06-2] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
1,2-Dichloropropane [78-87-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	10/19/10 04:35	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	10/19/10 04:35	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/10 04:35	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/10 04:35	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	10/19/10 04:35	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
Bromochloromethane [74-97-5] ^	0.42	U	ug/L	1	0.42	1.0	3	EPA 8260B	10/19/10 04:35	JKG	
Bromodichloromethane [75-27-4] ^	0.37	U	ug/L	1	0.37	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
Bromoform [75-25-2] ^	0.71	U	ug/L	1	0.71	1.0	3	EPA 8260B	10/19/10 04:35	JKG	
Bromomethane [74-83-9] ^	0.49	U	ug/L	1	0.49	1.0	10	EPA 8260B	10/19/10 04:35	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	10/19/10 04:35	JKG	
Carbon tetrachloride [56-23-5] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
Chlorobenzene [108-90-7] ^	0.27	U	ug/L	1	0.27	1.0	3	EPA 8260B	10/19/10 04:35	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	10/19/10 04:35	JKG	
Chloroform [67-66-3] ^	0.20	U	ug/L	1	0.20	1.0	5	EPA 8260B	10/19/10 04:35	JKG	
Chloromethane [74-87-3] ^	0.34	U	ug/L	1	0.34	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	10/19/10 04:35	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
Dibromochloromethane [124-48-1] ^	0.32	U	ug/L	1	0.32	1.0	3	EPA 8260B	10/19/10 04:35	JKG	
Dibromomethane [74-95-3] ^	0.37	U	ug/L	1	0.37	1.0	10	EPA 8260B	10/19/10 04:35	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	10/19/10 04:35	JKG	
Methylene chloride [75-09-2] ^	0.53	U	ug/L	1	0.53	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
Styrene [100-42-5] ^	0.26	U	ug/L	1	0.26	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
Tetrachloroethene [127-18-4] ^	0.36	U	ug/L	1	0.36	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	10/19/10 04:35	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	10/19/10 04:35	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
Trichlorofluoromethane [75-69-4] ^	0.28	U	ug/L	1	0.28	1.0	1	EPA 8260B	10/19/10 04:35	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	10/19/10 04:35	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	10/19/10 04:35	JKG	

Description: 4103-TripBlank

Lab Sample ID: C011803-04

Received: 10/12/10 14:00

Matrix: Water

Sampled: 10/11/10 13:35

Work Order: C011803

Project: White Street Landfill App Is (SMWs)

Sampled By: ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	10/19/10 04:35	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	51	1	50.0	101 %	51-122	0118026	EPA 8260B	10/19/10 04:35	JKG		
Dibromofluoromethane	53	1	50.0	106 %	68-117	0118026	EPA 8260B	10/19/10 04:35	JKG		
Toluene-d8	50	1	50.0	100 %	69-110	0118026	EPA 8260B	10/19/10 04:35	JKG		

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 0J16007 - EPA 5030B_MS

Blank (0J16007-BLK1)

Prepared: 10/16/2010 14:08 Analyzed: 10/18/2010 07:22

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.40	U	1.0	ug/L							
1,1,1-Trichloroethane	0.27	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.33	U	1.0	ug/L							
1,1,2-Trichloroethane	0.37	U	1.0	ug/L							
1,1-Dichloroethane	0.33	U	1.0	ug/L							
1,1-Dichloroethene	0.24	U	1.0	ug/L							
1,2,3-Trichloropropane	0.55	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.42	U	1.0	ug/L							
1,2-Dichlorobenzene	0.27	U	1.0	ug/L							
1,2-Dichloroethane	0.65	U	1.0	ug/L							
1,2-Dichloropropane	0.20	U	1.0	ug/L							
1,4-Dichlorobenzene	0.38	U	1.0	ug/L							
2-Butanone	1.0	U	5.0	ug/L							
2-Hexanone	0.69	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.5	U	5.0	ug/L							
Acrylonitrile	2.1	U	10	ug/L							
Benzene	0.20	U	1.0	ug/L							
Bromochloromethane	0.42	U	1.0	ug/L							
Bromodichloromethane	0.37	U	1.0	ug/L							
Bromoform	0.71	U	1.0	ug/L							
Bromomethane	0.49	U	1.0	ug/L							
Carbon disulfide	0.54	U	5.0	ug/L							
Carbon tetrachloride	0.38	U	1.0	ug/L							
Chlorobenzene	0.27	U	1.0	ug/L							
Chloroethane	0.30	U	1.0	ug/L							
Chloroform	0.20	U	1.0	ug/L							
Chloromethane	0.34	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.36	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.28	U	1.0	ug/L							
Dibromochloromethane	0.32	U	1.0	ug/L							
Dibromomethane	0.37	U	1.0	ug/L							
Ethylbenzene	0.20	U	1.0	ug/L							
Iodomethane	0.52	U	5.0	ug/L							
Methylene chloride	0.53	U	1.0	ug/L							
Styrene	0.26	U	1.0	ug/L							
Tetrachloroethene	0.36	U	1.0	ug/L							
Toluene	0.27	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.34	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.38	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.54	U	1.0	ug/L							
Trichloroethene	0.38	U	1.0	ug/L							
Trichlorofluoromethane	0.28	U	1.0	ug/L							
Vinyl acetate	0.98	U	5.0	ug/L							
Vinyl chloride	0.30	U	1.0	ug/L							
Xylenes (Total)	0.40	U	1.0	ug/L							
Surrogate: 4-Bromofluorobenzene	51			ug/L	50.0		102	51-122			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 0J16007 - EPA 5030B_MS

Blank (0J16007-BLK1) Continued

Prepared: 10/16/2010 14:08 Analyzed: 10/18/2010 07:22

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	56			ug/L	50.0		112	68-117			
Surrogate: Toluene-d8	50			ug/L	50.0		101	69-110			

LCS (0J16007-BS1)

Prepared: 10/16/2010 14:08 Analyzed: 10/18/2010 07:50

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	25		1.0	ug/L	20.0		126	75-133			
Benzene	21		1.0	ug/L	20.0		104	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		107	83-117			
Toluene	21		1.0	ug/L	20.0		104	71-118			
Trichloroethene	21		1.0	ug/L	20.0		107	75-115			

Matrix Spike (0J16007-MS1)

Prepared: 10/16/2010 14:08 Analyzed: 10/18/2010 08:18

Source: C012438-10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	25		1.0	ug/L	20.0	0.24 U	124	75-133			
Benzene	21		1.0	ug/L	20.0	0.20 U	105	81-134			
Chlorobenzene	22		1.0	ug/L	20.0	0.27 U	108	83-117			
Toluene	21		1.0	ug/L	20.0	0.27 U	104	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.38 U	106	75-115			

Matrix Spike Dup (0J16007-MSD1)

Prepared: 10/16/2010 14:08 Analyzed: 10/18/2010 08:46

Source: C012438-10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	24		1.0	ug/L	20.0	0.24 U	119	75-133	4	20	
Benzene	21		1.0	ug/L	20.0	0.20 U	103	81-134	2	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.27 U	105	83-117	3	16	
Toluene	20		1.0	ug/L	20.0	0.27 U	101	71-118	2	17	
Trichloroethene	21		1.0	ug/L	20.0	0.38 U	103	75-115	2	18	

Batch 0J18026 - EPA 5030B_MS

Blank (0J18026-BLK1)

Prepared: 10/18/2010 14:11 Analyzed: 10/18/2010 20:07

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.40	U	1.0	ug/L							
1,1,1-Trichloroethane	0.27	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.33	U	1.0	ug/L							
1,1,2-Trichloroethane	0.37	U	1.0	ug/L							
1,1-Dichloroethane	0.33	U	1.0	ug/L							
1,1-Dichloroethene	0.24	U	1.0	ug/L							
1,2,3-Trichloropropane	0.55	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.42	U	1.0	ug/L							
1,2-Dichlorobenzene	0.27	U	1.0	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 0118026 - EPA 5030B_MS

Blank (0118026-BLK1) Continued

Prepared: 10/18/2010 14:11 Analyzed: 10/18/2010 20:07

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dichloroethane	0.65	U	1.0	ug/L							
1,2-Dichloropropane	0.20	U	1.0	ug/L							
1,4-Dichlorobenzene	0.38	U	1.0	ug/L							
2-Butanone	1.0	U	5.0	ug/L							
2-Hexanone	0.69	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.5	U	5.0	ug/L							
Acrylonitrile	2.1	U	10	ug/L							
Benzene	0.20	U	1.0	ug/L							
Bromochloromethane	0.42	U	1.0	ug/L							
Bromodichloromethane	0.37	U	1.0	ug/L							
Bromoform	0.71	U	1.0	ug/L							
Bromomethane	0.49	U	1.0	ug/L							
Carbon disulfide	0.54	U	5.0	ug/L							
Carbon tetrachloride	0.38	U	1.0	ug/L							
Chlorobenzene	0.27	U	1.0	ug/L							
Chloroethane	0.30	U	1.0	ug/L							
Chloroform	0.20	U	1.0	ug/L							
Chloromethane	0.34	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.36	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.28	U	1.0	ug/L							
Dibromochloromethane	0.32	U	1.0	ug/L							
Dibromomethane	0.37	U	1.0	ug/L							
Ethylbenzene	0.20	U	1.0	ug/L							
Iodomethane	0.52	U	5.0	ug/L							
Methylene chloride	0.53	U	1.0	ug/L							
Styrene	0.26	U	1.0	ug/L							
Tetrachloroethene	0.36	U	1.0	ug/L							
Toluene	0.27	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.34	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.38	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.54	U	1.0	ug/L							
Trichloroethene	0.38	U	1.0	ug/L							
Trichlorofluoromethane	0.28	U	1.0	ug/L							
Vinyl acetate	0.98	U	5.0	ug/L							
Vinyl chloride	0.30	U	1.0	ug/L							
Xylenes (Total)	0.40	U	1.0	ug/L							
Surrogate: 4-Bromofluorobenzene	51			ug/L	50.0		102	51-122			
Surrogate: Dibromofluoromethane	54			ug/L	50.0		109	68-117			
Surrogate: Toluene-d8	50			ug/L	50.0		100	69-110			

LCS (0118026-BS1)

Prepared: 10/18/2010 14:11 Analyzed: 10/18/2010 20:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0		114	75-133			
Benzene	21		1.0	ug/L	20.0		104	81-134			
Chlorobenzene	22		1.0	ug/L	20.0		110	83-117			
Toluene	21		1.0	ug/L	20.0		104	71-118			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 0J18026 - EPA 5030B_MS

LCS (0J18026-BS1) Continued

Prepared: 10/18/2010 14:11 Analyzed: 10/18/2010 20:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichloroethene	21		1.0	ug/L	20.0		105	75-115			

Matrix Spike (0J18026-MS1)

Prepared: 10/18/2010 14:11 Analyzed: 10/18/2010 21:03

Source: C012522-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.24 U	109	75-133			
Benzene	20		1.0	ug/L	20.0	0.20 U	102	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.27 U	106	83-117			
Toluene	21		1.0	ug/L	20.0	0.27 U	104	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.38 U	105	75-115			

Matrix Spike Dup (0J18026-MSD1)

Prepared: 10/18/2010 14:11 Analyzed: 10/18/2010 21:32

Source: C012522-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	21		1.0	ug/L	20.0	0.24 U	105	75-133	4	20	
Benzene	20		1.0	ug/L	20.0	0.20 U	101	81-134	1	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.27 U	107	83-117	0.6	16	
Toluene	20		1.0	ug/L	20.0	0.27 U	100	71-118	4	17	
Trichloroethene	20		1.0	ug/L	20.0	0.38 U	101	75-115	4	18	

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 0J13015 - EPA 3005A

Blank (0J13015-BLK1)

Prepared: 10/13/2010 10:21 Analyzed: 10/19/2010 12:50

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (0J13015-BS1)

Prepared: 10/13/2010 10:21 Analyzed: 10/19/2010 12:55

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	522		10.0	ug/L	500		104	80-120			
Barium	513		10.0	ug/L	500		103	80-120			
Beryllium	266		1.00	ug/L	250		107	80-120			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 0J13015 - EPA 3005A

LCS (0J13015-BS1) Continued

Prepared: 10/13/2010 10:21 Analyzed: 10/19/2010 12:55

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cadmium	260		1.00	ug/L	250		104	80-120			
Chromium	516		10.0	ug/L	500		103	80-120			
Cobalt	517		10.0	ug/L	500		103	80-120			
Copper	259		10.0	ug/L	250		104	80-120			
Lead	522		10.0	ug/L	500		104	80-120			
Nickel	520		10.0	ug/L	500		104	80-120			
Silver	252		10.0	ug/L	250		101	80-120			
Vanadium	252		10.0	ug/L	250		101	80-120			
Zinc	520		10.0	ug/L	500		104	80-120			

Matrix Spike (0J13015-MS1)

Prepared: 10/13/2010 10:21 Analyzed: 10/19/2010 13:00

Source: C011803-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	555		10.0	ug/L	500	2.80 U	111	75-125			
Barium	676		10.0	ug/L	500	140	107	75-125			
Beryllium	279		1.00	ug/L	250	0.100 U	112	75-125			
Cadmium	274		1.00	ug/L	250	4.79	108	75-125			
Chromium	542		10.0	ug/L	500	6.52	107	75-125			
Cobalt	558		10.0	ug/L	500	7.34	110	75-125			
Copper	289		10.0	ug/L	250	18.1	108	75-125			
Lead	554		10.0	ug/L	500	3.42	110	75-125			
Nickel	537		10.0	ug/L	500	3.75	107	75-125			
Silver	263		10.0	ug/L	250	1.90 U	105	75-125			
Vanadium	282		10.0	ug/L	250	18.1	105	75-125			
Zinc	956		10.0	ug/L	500	409	109	75-125			

Matrix Spike Dup (0J13015-MSD1)

Prepared: 10/13/2010 10:21 Analyzed: 10/19/2010 13:11

Source: C011803-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	589		10.0	ug/L	500	2.80 U	118	75-125	6	20	
Barium	712		10.0	ug/L	500	140	114	75-125	5	20	
Beryllium	296		1.00	ug/L	250	0.100 U	118	75-125	6	20	
Cadmium	290		1.00	ug/L	250	4.79	114	75-125	6	20	
Chromium	572		10.0	ug/L	500	6.52	113	75-125	5	20	
Cobalt	590		10.0	ug/L	500	7.34	117	75-125	6	20	
Copper	304		10.0	ug/L	250	18.1	114	75-125	5	20	
Lead	586		10.0	ug/L	500	3.42	116	75-125	6	20	
Nickel	570		10.0	ug/L	500	3.75	113	75-125	6	20	
Silver	278		10.0	ug/L	250	1.90 U	111	75-125	5	20	
Vanadium	297		10.0	ug/L	250	18.1	112	75-125	5	20	
Zinc	1010		10.0	ug/L	500	409	120	75-125	5	20	

Post Spike (0J13015-PS1)

Prepared: 10/13/2010 10:21 Analyzed: 10/19/2010 13:14

Source: C011803-01

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 0J13015 - EPA 3005A

Post Spike (0J13015-PS1) Continued

Prepared: 10/13/2010 10:21 Analyzed: 10/19/2010 13:14

Source: C011803-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	1.14		0.0100	mg/L	1.00	0.000362	114	80-120			
Barium	1.27		0.0100	mg/L	1.00	0.140	113	80-120			
Beryllium	0.586		0.00100	mg/L	0.500	-7.50E-5	117	80-120			
Cadmium	0.572		0.00100	mg/L	0.500	0.00479	114	80-120			
Chromium	1.14		0.0100	mg/L	1.00	0.00652	113	80-120			
Cobalt	1.11		0.0100	mg/L	1.00	0.00734	111	80-120			
Copper	0.596		0.0100	mg/L	0.500	0.0181	116	80-120			
Lead	1.13		0.0100	mg/L	1.00	0.00342	113	80-120			
Nickel	1.12		0.0100	mg/L	1.00	0.00375	111	80-120			
Silver	0.570		0.0100	mg/L	0.500	-1.19E-5	114	80-120			
Vanadium	0.575		0.0100	mg/L	0.500	0.0181	111	80-120			
Zinc	1.57		0.0100	mg/L	1.00	0.409	116	80-120			

Batch 0J13016 - EPA 3005A

Blank (0J13016-BLK1)

Prepared: 10/13/2010 10:25 Analyzed: 10/26/2010 11:06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (0J13016-BS1)

Prepared: 10/13/2010 10:25 Analyzed: 10/26/2010 11:10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	27.4		2.00	ug/L	25.0		110	80-120			
Selenium	27.5		1.00	ug/L	25.0		110	80-120			
Thallium	26.8		1.00	ug/L	25.0		107	80-120			

Matrix Spike (0J13016-MS1)

Prepared: 10/13/2010 10:25 Analyzed: 10/26/2010 11:17

Source: C012357-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	20.4		2.00	ug/L	25.0	0.280	80	75-125			
Selenium	23.9		1.00	ug/L	25.0	0.830 U	96	75-125			
Thallium	24.5		1.00	ug/L	25.0	0.110 U	98	75-125			

Matrix Spike Dup (0J13016-MSD1)

Prepared: 10/13/2010 10:25 Analyzed: 10/26/2010 11:21

Source: C012357-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	20.3		2.00	ug/L	25.0	0.280	80	75-125	0.7	20	
Selenium	23.2		1.00	ug/L	25.0	0.830 U	93	75-125	3	20	
Thallium	24.9		1.00	ug/L	25.0	0.110 U	100	75-125	2	20	

Post Spike (0J13016-PS1)

Prepared: 10/13/2010 10:25 Analyzed: 10/26/2010 11:24

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 0113016 - EPA 3005A

Post Spike (0113016-PS1) Continued

Prepared: 10/13/2010 10:25 Analyzed: 10/26/2010 11:24

Source: C012357-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Units	RPD	RPD Limit	Notes
Antimony	28.4		2.00	ug/L	25.0	0.280	112	80-120			
Selenium	29.0		1.00	ug/L	25.0	0.142	116	80-120			
Thallium	27.1		1.00	ug/L	25.0	-0.299	109	80-120			

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.

Client Name S&ME, Inc. (SM064)							
Project Number: [None]							
Address 3718 Old Battleground Rd. Greensboro, NC 27410							
City/State/Zip Greensboro, NC 27410							
Phone/Fax (336) 288-7180 / (336) 288-8960							
Billing Contact Edmund Henriques							
Billing Office ACCOUNTING Payable							
Site Location - Two Zone							
Samples Name, Altitude (Feet) GARY SIMMONS S&ME INC.							
Sampler's Signature <i>[Signature]</i>							
Sample ID Field Identification	Collection Date	Catchment Line	Vials (per station)	Trip Log	Total # Containers	Total # of Containers	
4103-SMW1	10/11/10	L000	GW	4	X X		
4103-SMW3	10/11/10	L455	GW	4	X X		
4103-SMW4	10/11/10	L335	GW	4	X X		
4103-TripBlank			GW	2	X		

Requested Analysis:

Standard	Expedited
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Due: _____

Lab Workorder: C011803

Preservation: See Labels (Combustion necessary)

8260B Appendix 1

Date: 10/11/10
Received By: E. Biana
Time: 1:00 PM
Signature: [Signature]
Unacceptable: [X] Acceptable

Substrate: SW Surface Water; WW Wastewater; A-4r O-4r Other (detail in comments); Preservation: 1:10 H₂O; 1:10 H₂SO₄; 5:425 H₂O; NO-3, NO₂-N, O₂, CO₂, total in comments; Date: All samples submitted to ENCO Labs are in accordance with the terms and conditions by 401 of the use of this form. Values in italics are values submitted by field.



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Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090

FAX: 919.467.3515



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Wednesday, November 4, 2009

S&ME, Inc. (SM004)

Attn: Connel Ware

3718 Old Battleground Rd.

Greensboro, NC 27410

RE: Laboratory Results for

Project Number: 1584-98-081, Project Name/Desc: White Street Landfill MNA

ENCO Workorder: C911892

Dear Connel Ware,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Saturday, October 17, 2009.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith". The signature is written in a cursive, flowing style.

Chuck Smith

Project Manager

Enclosure(s)

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 4103 II - 1		Lab ID: C911892-01		Sampled: 10/16/09 10:00		Received: 10/17/09 09:45	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	11/13/09	10/18/09	07:22	10/19/2009 06:51			
EPA 353.2	11/13/09	10/20/09	08:55	10/20/2009 08:55			
RSK 175	10/30/09	10/23/09	09:11	10/23/2009 10:38			
SM18 4500-S D	10/23/09	10/23/09	14:20	10/23/2009 14:20			
SM18 5310B	11/13/09	10/21/09	15:00	10/21/2009 15:17			
Volatile Fatty Acids	10/30/09	10/20/09	10:16	10/21/2009 16:12			

Client ID: 4103 II - 1		Lab ID: C911892-01RE1		Sampled: 10/16/09 10:00		Received: 10/17/09 09:45	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	11/13/09	10/18/09 07:22		10/19/2009 14:38			
RSK 175	10/30/09	10/23/09 09:11		10/23/2009 11:10			

Client ID: 4103 II - 1		Lab ID: C911892-01RE2		Sampled: 10/16/09 10:00		Received: 10/17/09 09:45	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 310.2	10/30/09	10/18/09 07:13		10/18/2009 09:41			

Client ID: 4103 II - 2		Lab ID: C911892-02		Sampled: 10/16/09 12:50		Received: 10/17/09 09:45	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	11/13/09	10/18/09	07:22	10/19/2009 07:41			
EPA 353.2	11/13/09	10/20/09	08:55	10/20/2009 08:55			
RSK 175	10/30/09	10/23/09	09:11	10/23/2009 10:16			
SM18 4500-S D	10/23/09	10/23/09	14:20	10/23/2009 14:20			
SM18 5310B	11/13/09	10/21/09	15:00	10/21/2009 15:17			
Volatile Fatty Acids	10/30/09	10/20/09	10:16	10/21/2009 17:14			

Client ID: 4103 II - 2		Lab ID: C911892-02RE1		Sampled: 10/16/09 12:50		Received: 10/17/09 09:45	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 310.2	10/30/09	10/18/09 07:13		10/18/2009 09:27			

Client ID: 4103 II - 7		Lab ID: C912221-01		Sampled: 10/19/09 12:45		Received: 10/20/09 11:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	11/16/09	10/25/09	07:30	10/26/2009 06:55			
EPA 310.2	11/02/09	10/25/09	11:29	10/25/2009 14:09			
EPA 353.2	11/16/09	10/27/09	08:04	10/27/2009 08:04			
RSK 175	11/02/09	10/23/09	09:11	10/23/2009 10:49			
SM18 4500-S D	10/26/09	10/23/09	14:20	10/23/2009 14:20			
SM18 5310B	11/16/09	10/28/09	10:00	10/28/2009 13:24			
Volatile Fatty Acids	11/02/09	10/23/09	09:07	10/23/2009 14:56			



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Client ID: 4103 II - 7	Lab ID: C912221-01RE1	Sampled: 10/19/09 12:45	Received: 10/20/09 11:00
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK 175	11/02/09	10/23/09 09:11	10/23/2009 11:23

Client ID: 4103 II - 7B	Lab ID: C912221-02	Sampled: 10/19/09 10:10	Received: 10/20/09 11:00
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	11/16/09	10/25/09 07:30	10/26/2009 07:11
EPA 310.2	11/02/09	10/25/09 11:29	10/25/2009 14:10
EPA 353.2	11/16/09	10/27/09 08:04	10/27/2009 08:04
RSK 175	11/02/09	10/23/09 09:11	10/23/2009 10:53
SM18 4500-S D	10/26/09	10/23/09 14:20	10/23/2009 14:20
SM18 5310B	11/16/09	10/28/09 10:00	10/28/2009 13:24
Volatile Fatty Acids	11/02/09	10/23/09 09:07	10/23/2009 15:59

Client ID: 4103 II - 7B	Lab ID: C912221-02RE1	Sampled: 10/19/09 10:10	Received: 10/20/09 11:00
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	11/16/09	10/25/09 07:30	10/26/2009 08:29

Client ID: 4103 MW-14	Lab ID: C912260-01	Sampled: 10/20/09 18:00	Received: 10/21/09 13:30
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	11/17/09	10/25/09 07:30	10/26/2009 07:26
EPA 310.2	11/03/09	10/25/09 11:29	10/25/2009 14:11
EPA 353.2	11/17/09	11/03/09 11:47	11/3/2009 11:47
RSK 175	11/03/09	10/23/09 09:11	10/23/2009 10:57
SM18 4500-S D	10/27/09	10/26/09 16:00	10/26/2009 16:00
SM18 5310B	11/17/09	10/28/09 16:00	10/28/2009 23:05
Volatile Fatty Acids	11/03/09	10/23/09 09:07	10/23/2009 17:01

Client ID: 4103 II-2B	Lab ID: C912260-02	Sampled: 10/20/09 15:45	Received: 10/21/09 13:30
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	11/17/09	10/25/09 07:30	10/26/2009 07:42
EPA 353.2	11/17/09	11/03/09 11:47	11/3/2009 11:47
RSK 175	11/03/09	10/23/09 09:11	10/23/2009 11:01
SM18 4500-S D	10/27/09	10/26/09 16:00	10/26/2009 16:00
SM18 5310B	11/17/09	10/28/09 16:00	10/28/2009 23:05
Volatile Fatty Acids	11/03/09	10/23/09 09:07	10/23/2009 18:04

Client ID: 4103 II-2B	Lab ID: C912260-02RE1	Sampled: 10/20/09 15:45	Received: 10/21/09 13:30
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 310.2	11/03/09	10/29/09 07:42	10/29/2009 08:40
RSK 175	11/03/09	10/23/09 09:11	10/23/2009 11:27



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Client ID: 4103 II-9		Lab ID: C912260-03		Sampled: 10/20/09 12:00		Received: 10/21/09 13:30	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	11/17/09	10/25/09	07:30	10/26/2009 07:58			
EPA 353.2	11/17/09	11/03/09	11:47	11/3/2009 11:47			
RSK 175	11/03/09	10/23/09	09:11	10/23/2009 11:04			
SM18 4500-S D	10/27/09	10/26/09	16:00	10/26/2009 16:00			
SM18 5310B	11/17/09	10/28/09	16:00	10/28/2009 23:05			
Volatile Fatty Acids	11/03/09	10/23/09	09:07	10/23/2009 19:07			

Client ID: 4103 II-9		Lab ID: C912260-03RE1		Sampled: 10/20/09 12:00		Received: 10/21/09 13:30	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 310.2	11/03/09	10/29/09	07:42	10/29/2009 08:41			
RSK 175	11/03/09	10/23/09	09:11	10/23/2009 11:31			

NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 4103 II - 1				Lab ID: C911892-01					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetic Acid	25		1	0.071	0.50	NE	mg/L	Volatile Fatty Acids	
Methane	0.266		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.028	J	1	0.0056	0.10	10	mg/L	EPA 353.2	
Sulfate as SO ₄	12	J	1	0.078	5.0	250	mg/L	EPA 300.0	
Total Organic Carbon	30		1	0.32	1.0	NE	mg/L	SM18 5310B	

Client ID: 4103 II - 1				Lab ID: C911892-01RE1					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	733	D	10	7.80	25.0	NE	mg/L	RSK 175	
Chloride	410	D	10	0.18	50	NE	mg/L	EPA 300.0	

Client ID: 4103 II - 1				Lab ID: C911892-01RE2					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Total Alkalinity	320	D	5	42	75	NE	mg/L	EPA 310.2	

Client ID: 4103 II - 2				Lab ID: C911892-02					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	110		1	0.780	2.50	NE	mg/L	RSK 175	
Chloride	11		1	0.018	5.0	NE	mg/L	EPA 300.0	
Lactic Acid	0.17	J	1	0.088	0.50	NE	mg/L	Volatile Fatty Acids	
Methane	1.06		1	0.0002	0.001	NE	mg/L	RSK 175	
Sulfate as SO ₄	27	J	1	0.078	5.0	250	mg/L	EPA 300.0	
Total Organic Carbon	0.88	J	1	0.32	1.0	NE	mg/L	SM18 5310B	

Client ID: 4103 II - 2				Lab ID: C911892-02RE1					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Total Alkalinity	370	D	2	17	30	NE	mg/L	EPA 310.2	

Client ID: 4103 II - 7				Lab ID: C912221-01					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetic Acid	0.64		1	0.071	0.50	NE	mg/L	Volatile Fatty Acids	
Chloride	58		1	0.018	5.0	NE	mg/L	EPA 300.0	
Methane	0.450		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.33	J	1	0.0056	0.10	10	mg/L	EPA 353.2	
Sulfate as SO ₄	23	J	1	0.078	5.0	250	mg/L	EPA 300.0	
Total Alkalinity	59		1	8.3	15	NE	mg/L	EPA 310.2	
Total Organic Carbon	7.3		1	0.32	1.0	NE	mg/L	SM18 5310B	

Client ID: 4103 II - 7				Lab ID: C912221-01RE1					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	320	D	5	3.90	12.5	NE	mg/L	RSK 175	

Client ID: 4103 II - 7B				Lab ID: C912221-02					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetic Acid	0.53		1	0.071	0.50	NE	mg/L	Volatile Fatty Acids	
Chloride	4.7	J	1	0.018	5.0	NE	mg/L	EPA 300.0	
Methane	0.023		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.28	J	1	0.0056	0.10	10	mg/L	EPA 353.2	



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Client ID:	4103 II - 7B	Lab ID:	C912221-02
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Total Alkalinity	99		1	8.3	15	NE	mg/L	EPA 310.2	
Total Organic Carbon	2.5		1	0.32	1.0	NE	mg/L	SM18 5310B	

Client ID:	4103 II - 7B	Lab ID:	C912221-02RE1
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Sulfate as SO4	100	J	2	0.16	10	250	mg/L	EPA 300.0	

Client ID:	4103 MW-14	Lab ID:	C912260-01
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetic Acid	0.58		1	0.071	0.50	NE	mg/L	Volatile Fatty Acids	
Carbon dioxide	85.5		1	0.780	2.50	NE	mg/L	RSK 175	
Chloride	3.3	J	1	0.018	5.0	NE	mg/L	EPA 300.0	
Methane	0.001		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.017	J	1	0.0056	0.10	10	mg/L	EPA 353.2	
Sulfate as SO4	2.0	J	1	0.078	5.0	250	mg/L	EPA 300.0	
Total Alkalinity	19		1	8.3	15	NE	mg/L	EPA 310.2	

Client ID:	4103 II-2B	Lab ID:	C912260-02
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	10		1	0.018	5.0	NE	mg/L	EPA 300.0	
Lactic Acid	0.46	J	1	0.088	0.50	NE	mg/L	Volatile Fatty Acids	
Methane	1.13		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.41	J	1	0.0056	0.10	10	mg/L	EPA 353.2	
Sulfate as SO4	21	J	1	0.078	5.0	250	mg/L	EPA 300.0	
Total Organic Carbon	2.1		1	0.32	1.0	NE	mg/L	SM18 5310B	

Client ID:	4103 II-2B	Lab ID:	C912260-02RE1
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	235	D	5	3.90	12.5	NE	mg/L	RSK 175	
Total Alkalinity	220	D	2	17	30	NE	mg/L	EPA 310.2	

Client ID:	4103 II-9	Lab ID:	C912260-03
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetic Acid	0.39	J	1	0.071	0.50	NE	mg/L	Volatile Fatty Acids	
Chloride	10		1	0.018	5.0	NE	mg/L	EPA 300.0	
Methane	0.085		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.077	J	1	0.0056	0.10	10	mg/L	EPA 353.2	
Sulfate as SO4	16	J	1	0.078	5.0	250	mg/L	EPA 300.0	
Total Organic Carbon	2.5		1	0.32	1.0	NE	mg/L	SM18 5310B	

Client ID:	4103 II-9	Lab ID:	C912260-03RE1
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	280	D	5	3.90	12.5	NE	mg/L	RSK 175	
Total Alkalinity	190	D	2	17	30	NE	mg/L	EPA 310.2	

ANALYTICAL RESULTS

Description: 4103 II - 1
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C911892-01
Sampled: 10/16/09 10:00
Sampled By: Connel Ware

Received: 10/17/09 09:45
Work Order: C911892

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	410	D	mg/L	10	0.18	50	NE	EPA 300.0	10/19/09 14:38	PEV	
Nitrate as N [14797-55-8] ^	0.028	J	mg/L	1	0.0056	0.10	10	EPA 353.2	10/20/09 08:55	PEV	
Sulfate as SO4 [14808-79-8] ^	12	J	mg/L	1	0.078	5.0	250	EPA 300.0	10/19/09 06:51	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	10/23/09 14:20	AJB	
Total Alkalinity [471-34-1] ^	320	D	mg/L	5	42	75	NE	EPA 310.2	10/18/09 09:41	PEV	

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	30		mg/L	1	0.32	1.0	NE	SM18 5310B	10/21/09 15:17	NAS	

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	733	D	mg/L	10	7.80	25.0	NE	RSK 175	10/23/09 11:10	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 10:38	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 10:38	LAC	
Methane [74-82-8]	0.266		mg/L	1	0.0002	0.001	NE	RSK 175	10/23/09 10:38	LAC	

Description: 4103 II - 1
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C911892-01
Sampled: 10/16/09 10:00
Sampled By: Connel Ware

Received: 10/17/09 09:45
Work Order: C911892

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	25		mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	10/21/09 16:12	LAC	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	10/21/09 16:12	LAC	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	10/21/09 16:12	LAC	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	3.4		mg/L	1	0.098	0.50		Volatile Fatty Acids	10/21/09 16:12	LAC	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	10/21/09 16:12	LAC	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	10/21/09 16:12	LAC	
Lactic Acid [50-21-5]	0.088	U	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	10/21/09 16:12	LAC	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	10/21/09 16:12	LAC	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	10/21/09 16:12	LAC	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	10/21/09 16:12	LAC	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	62	1	50.0	124 %	80-124	9120013	Volatile Fatty Acids	10/21/09 16:12	LAC	

Description: 4103 II - 2
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C911892-02
Sampled: 10/16/09 12:50
Sampled By: Connel Ware

Received: 10/17/09 09:45
Work Order: C911892

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	11		mg/L	1	0.018	5.0	NE	EPA 300.0	10/19/09 07:41	PEV	
Nitrate as N [14797-55-8] ^	0.0056	U	mg/L	1	0.0056	0.10	10	EPA 353.2	10/20/09 08:55	PEV	
Sulfate as SO4 [14808-79-8] ^	27	J	mg/L	1	0.078	5.0	250	EPA 300.0	10/19/09 07:41	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	10/23/09 14:20	AJB	
Total Alkalinity [471-34-1] ^	370	D	mg/L	2	17	30	NE	EPA 310.2	10/18/09 09:27	PEV	

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	0.88	J	mg/L	1	0.32	1.0	NE	SM18 5310B	10/21/09 15:17	NAS	

Description: 4103 II - 2
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C911892-02
Sampled: 10/16/09 12:50
Sampled By: Connel Ware

Received: 10/17/09 09:45
Work Order: C911892

Dissolved Gases by GC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Carbon dioxide [124-38-9]	110		mg/L	1	0.780	2.50	NE	RSK 175	10/23/09 10:16	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 10:16	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 10:16	LAC	
Methane [74-82-8]	1.06		mg/L	1	0.0002	0.001	NE	RSK 175	10/23/09 10:16	LAC	

Description: 4103 II - 2
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C911892-02
Sampled: 10/16/09 12:50
Sampled By: Connel Ware

Received: 10/17/09 09:45
Work Order: C911892

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.071	U	mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	10/21/09 17:14	LAC	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	10/21/09 17:14	LAC	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	10/21/09 17:14	LAC	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	10/21/09 17:14	LAC	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	10/21/09 17:14	LAC	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	10/21/09 17:14	LAC	
Lactic Acid [50-21-5]	0.17	J	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	10/21/09 17:14	LAC	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	10/21/09 17:14	LAC	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	10/21/09 17:14	LAC	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	10/21/09 17:14	LAC	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	63	1	50.0	125 %	80-124	9120013	Volatile Fatty Acids	10/21/09 17:14	LAC	QA-03

Description: 4103 II - 7
Matrix: Water
Project: White Street Landfill MNA

Lab Sample ID: C912221-01
Sampled: 10/19/09 12:45
Sampled By: Gary Simcox

Received: 10/20/09 11:00
Work Order: C912221

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	58		mg/L	1	0.018	5.0	NE	EPA 300.0	10/26/09 06:55	PEV	
Nitrate as N [14797-55-8] ^	0.33	J	mg/L	1	0.0056	0.10	10	EPA 353.2	10/27/09 08:04	PEV	
Sulfate as SO4 [14808-79-8] ^	23	J	mg/L	1	0.078	5.0	250	EPA 300.0	10/26/09 06:55	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	10/23/09 14:20	AJB	
Total Alkalinity [471-34-1] ^	59		mg/L	1	8.3	15	NE	EPA 310.2	10/25/09 14:09	PEV	

Description: 4103 II - 7
Matrix: Water
Project: White Street Landfill MNA

Lab Sample ID: C912221-01
Sampled: 10/19/09 12:45
Sampled By: Gary Simcox

Received: 10/20/09 11:00
Work Order: C912221

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	7.3		mg/L	1	0.32	1.0	NE	SM18 5310B	10/28/09 13:24	RSA	

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	320	D	mg/L	5	3.90	12.5	NE	RSK 175	10/23/09 11:23	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 10:49	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 10:49	LAC	
Methane [74-82-8]	0.450		mg/L	1	0.0002	0.001	NE	RSK 175	10/23/09 10:49	LAC	

Description: 4103 II - 7

Lab Sample ID: C912221-01

Received: 10/20/09 11:00

Matrix: Water

Sampled: 10/19/09 12:45

Work Order: C912221

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.64		mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	10/23/09 14:56	MYE	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	10/23/09 14:56	MYE	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	10/23/09 14:56	MYE	
HIIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	10/23/09 14:56	MYE	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	10/23/09 14:56	MYE	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	10/23/09 14:56	MYE	
Lactic Acid [50-21-5]	0.088	U	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	10/23/09 14:56	MYE	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	10/23/09 14:56	MYE	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	10/23/09 14:56	MYE	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	10/23/09 14:56	MYE	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	69	1	50.0	137 %	80-124	9123006	Volatile Fatty Acids	10/23/09 14:56	MYE	QA-03

Description: 4103 II - 7B

Lab Sample ID: C912221-02

Received: 10/20/09 11:00

Matrix: Water

Sampled: 10/19/09 10:10

Work Order: C912221

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	4.7	J	mg/L	1	0.018	5.0	NE	EPA 300.0	10/26/09 07:11	PEV	
Nitrate as N [14797-55-8] ^	0.28	J	mg/L	1	0.0056	0.10	10	EPA 353.2	10/27/09 08:04	PEV	
Sulfate as SO4 [14808-79-8] ^	100	JD	mg/L	2	0.16	10	250	EPA 300.0	10/26/09 08:29	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	10/23/09 14:20	GPW	
Total Alkalinity [471-34-1] ^	99		mg/L	1	8.3	15	NE	EPA 310.2	10/25/09 14:10	PEV	



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Description: 4103 II - 7B

Matrix: Water

Project: White Street Landfill MNA

Lab Sample ID: C912221-02

Sampled: 10/19/09 10:10

Sampled By: Gary Simcox

Received: 10/20/09 11:00

Work Order: C912221

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	2.5		mg/L	1	0.32	1.0	NE	SM18 5310B	10/28/09 13:24	RSA	



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Description: 4103 II - 7B

Matrix: Water

Project: White Street Landfill MNA

Lab Sample ID: C912221-02

Sampled: 10/19/09 10:10

Sampled By: Gary Simcox

Received: 10/20/09 11:00

Work Order: C912221

Dissolved Gases by GC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Carbon dioxide [124-38-9]	0.780	U	mg/L	1	0.780	2.50	NE	RSK 175	10/23/09 10:53	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 10:53	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 10:53	LAC	
Methane [74-82-8]	0.023		mg/L	1	0.0002	0.001	NE	RSK 175	10/23/09 10:53	LAC	

Description: 4103 II - 7B
Matrix: Water
Project: White Street Landfill MNA

Lab Sample ID: C912221-02
Sampled: 10/19/09 10:10
Sampled By: Gary Simcox

Received: 10/20/09 11:00
Work Order: C912221

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.53		mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	10/23/09 15:59	MYE	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	10/23/09 15:59	MYE	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	10/23/09 15:59	MYE	
HTBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	10/23/09 15:59	MYE	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	10/23/09 15:59	MYE	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	10/23/09 15:59	MYE	
Lactic Acid [50-21-5]	0.088	U	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	10/23/09 15:59	MYE	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	10/23/09 15:59	MYE	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	10/23/09 15:59	MYE	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	10/23/09 15:59	MYE	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	65	1	50.0	130 %	80-124	9123006	Volatile Fatty Acids	10/23/09 15:59	MYE	QA-03

Description: 4103 MW-14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C912260-01
Sampled: 10/20/09 18:00
Sampled By: Gary Simcox

Received: 10/21/09 13:30
Work Order: C912260

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	3.3	J	mg/L	1	0.018	5.0	NE	EPA 300.0	10/26/09 07:26	PEV	
Nitrate as N [14797-55-8] ^	0.017	J	mg/L	1	0.0056	0.10	10	EPA 353.2	11/03/09 11:47	PEV	
Sulfate as SO4 [14808-79-8] ^	2.0	J	mg/L	1	0.078	5.0	250	EPA 300.0	10/26/09 07:26	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	10/26/09 16:00	GPW	
Total Alkalinity [471-34-1] ^	19		mg/L	1	8.3	15	NE	EPA 310.2	10/25/09 14:11	PEV	

Description: 4103 MW-14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C912260-01
Sampled: 10/20/09 18:00
Sampled By: Gary Simcox

Received: 10/21/09 13:30
Work Order: C912260

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	0.32	U	mg/L	1	0.32	1.0	NE	SM18 5310B	10/28/09 23:05	RSA	



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Description: 4103 MW-14

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C912260-01

Sampled: 10/20/09 18:00

Sampled By: Gary Simcox

Received: 10/21/09 13:30

Work Order: C912260

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	85.5		mg/L	1	0.780	2.50	NE	RSK 175	10/23/09 10:57	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 10:57	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 10:57	LAC	
Methane [74-82-8]	0.001		mg/L	1	0.0002	0.001	NE	RSK 175	10/23/09 10:57	LAC	

Description: 4103 MW-14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C912260-01
Sampled: 10/20/09 18:00
Sampled By: Gary Simcox

Received: 10/21/09 13:30
Work Order: C912260

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.58		mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	10/23/09 17:01	MYE	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	10/23/09 17:01	MYE	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	10/23/09 17:01	MYE	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	10/23/09 17:01	MYE	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	10/23/09 17:01	MYE	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	10/23/09 17:01	MYE	
Lactic Acid [50-21-5]	0.088	U	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	10/23/09 17:01	MYE	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	10/23/09 17:01	MYE	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	10/23/09 17:01	MYE	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	10/23/09 17:01	MYE	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	65	1	50.0	131 %	80-124	9J23006	Volatile Fatty Acids	10/23/09 17:01	MYE	QA-03

Description: 4103 II-2B
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C912260-02
Sampled: 10/20/09 15:45
Sampled By: Gary Simcox

Received: 10/21/09 13:30
Work Order: C912260

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	10		mg/L	1	0.018	5.0	NE	EPA 300.0	10/26/09 07:42	PEV	
Nitrate as N [14797-55-8] ^	0.41	J	mg/L	1	0.0056	0.10	10	EPA 353.2	11/03/09 11:47	PEV	
Sulfate as SO4 [14808-79-8] ^	21	J	mg/L	1	0.078	5.0	250	EPA 300.0	10/26/09 07:42	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	10/26/09 16:00	GPW	
Total Alkalinity [471-34-1] ^	220	D	mg/L	2	17	30	NE	EPA 310.2	10/29/09 08:40	PEV	

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	2.1		mg/L	1	0.32	1.0	NE	SM18 5310B	10/28/09 23:05	RSA	

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	235	D	mg/L	5	3.90	12.5	NE	RSK 175	10/23/09 11:27	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 11:01	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 11:01	LAC	
Methane [74-82-8]	1.13		mg/L	1	0.0002	0.001	NE	RSK 175	10/23/09 11:01	LAC	

Description: 4103 II-2B
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C912260-02
Sampled: 10/20/09 15:45
Sampled By: Gary Simcox

Received: 10/21/09 13:30
Work Order: C912260

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.071	U	mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	10/23/09 18:04	MYE	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	10/23/09 18:04	MYE	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	10/23/09 18:04	MYE	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	10/23/09 18:04	MYE	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	10/23/09 18:04	MYE	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	10/23/09 18:04	MYE	
Lactic Acid [50-21-5]	0.46	J	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	10/23/09 18:04	MYE	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	10/23/09 18:04	MYE	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	10/23/09 18:04	MYE	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	10/23/09 18:04	MYE	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	64	1	50.0	127 %	80-124	9J23006	Volatile Fatty Acids	10/23/09 18:04	MYE	QA-03

Description: 4103 II-9
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C912260-03
Sampled: 10/20/09 12:00
Sampled By: Gary Simcox

Received: 10/21/09 13:30
Work Order: C912260

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	10		mg/L	1	0.018	5.0	NE	EPA 300.0	10/26/09 07:58	PEV	
Nitrate as N [14797-55-8] ^	0.077	J	mg/L	1	0.0056	0.10	10	EPA 353.2	11/03/09 11:47	PEV	
Sulfate as SO4 [14808-79-8] ^	16	J	mg/L	1	0.078	5.0	250	EPA 300.0	10/26/09 07:58	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	10/26/09 16:00	GPW	
Total Alkalinity [471-34-1] ^	190	D	mg/L	2	17	30	NE	EPA 310.2	10/29/09 08:41	PEV	

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	2.5		mg/L	1	0.32	1.0	NE	SM18 5310B	10/28/09 23:05	RSA	

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	280	D	mg/L	5	3.90	12.5	NE	RSK 175	10/23/09 11:31	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 11:04	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	10/23/09 11:04	LAC	
Methane [74-82-8]	0.085		mg/L	1	0.0002	0.001	NE	RSK 175	10/23/09 11:04	LAC	

Description: 4103 II-9
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C912260-03
Sampled: 10/20/09 12:00
Sampled By: Gary Simcox

Received: 10/21/09 13:30
Work Order: C912260

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.39	J	mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	10/23/09 19:07	MYE	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	10/23/09 19:07	MYE	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	10/23/09 19:07	MYE	
HiBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	10/23/09 19:07	MYE	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	10/23/09 19:07	MYE	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	10/23/09 19:07	MYE	
Lactic Acid [50-21-5]	0.088	U	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	10/23/09 19:07	MYE	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	10/23/09 19:07	MYE	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	10/23/09 19:07	MYE	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	10/23/09 19:07	MYE	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	64	1	50.0	129 %	80-124	9123006	Volatile Fatty Acids	10/23/09 19:07	MYE	QA-03

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 9J18002 - NO PREP

Blank (9J18002-BLK1)

Prepared: 10/18/2009 07:13 Analyzed: 10/18/2009 08:44

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	8.3	U	15	mg/L							

LCS (9J18002-BS1)

Prepared: 10/18/2009 07:13 Analyzed: 10/18/2009 08:45

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	100		15	mg/L	100		102	80-120			

Matrix Spike (9J18002-MS1)

Prepared: 10/18/2009 07:13 Analyzed: 10/18/2009 08:49

Source: C911016-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	96		15	mg/L	100	3.5	93	80-120			

Matrix Spike Dup (9J18002-MSD1)

Prepared: 10/18/2009 07:13 Analyzed: 10/18/2009 08:50

Source: C911016-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	99		15	mg/L	100	3.5	96	80-120	3	25	

Batch 9J18005 - NO PREP

Blank (9J18005-BLK1)

Prepared: 10/18/2009 07:22 Analyzed: 10/18/2009 21:26

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	0.018	U	5.0	mg/L							
Sulfate as SO ₄	0.078	U	5.0	mg/L							

LCS (9J18005-BS1)

Prepared: 10/18/2009 07:22 Analyzed: 10/18/2009 21:43

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	46		5.0	mg/L	50.0		91	90-110			
Sulfate as SO ₄	47		5.0	mg/L	50.0		95	90-110			

Matrix Spike (9J18005-MS1)

Prepared: 10/18/2009 07:22 Analyzed: 10/18/2009 22:00

Source: C911016-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	50		5.0	mg/L	50.0	5.0	90	80-120			
Sulfate as SO ₄	52		5.0	mg/L	50.0	5.5	94	80-120			

Matrix Spike Dup (9J18005-MSD1)

Prepared: 10/18/2009 07:22 Analyzed: 10/18/2009 22:16

Source: C911016-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	50		5.0	mg/L	50.0	5.0	90	80-120	0.5	15	
Sulfate as SO ₄	52		5.0	mg/L	50.0	5.5	94	80-120	0.1	15	

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 9J18005 - NO PREP

Batch 9J23026 - NO PREP

Blank (9J23026-BLK1)

Prepared & Analyzed: 10/23/2009 14:20

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.031	U	0.10	mg/L							

LCS (9J23026-BS1)

Prepared & Analyzed: 10/23/2009 14:20

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.41		0.10	mg/L	0.401		102	80-120			

Matrix Spike (9J23026-MS1)

Prepared & Analyzed: 10/23/2009 14:20

Source: C911892-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.18		0.10	mg/L	0.401	0.031 U	45	80-120			QM-07

Matrix Spike Dup (9J23026-MSD1)

Prepared & Analyzed: 10/23/2009 14:20

Source: C911892-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.13		0.10	mg/L	0.401	0.031 U	33	80-120	30	25	QM-07

Batch 9J25003 - NO PREP

Blank (9J25003-BLK1)

Prepared: 10/25/2009 07:30 Analyzed: 10/26/2009 00:01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	0.018	U	5.0	mg/L							
Sulfate as SO4	0.078	U	5.0	mg/L							

LCS (9J25003-BS1)

Prepared: 10/25/2009 07:30 Analyzed: 10/26/2009 00:16

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	47		5.0	mg/L	50.0		94	90-110			
Sulfate as SO4	47		5.0	mg/L	50.0		93	90-110			

Matrix Spike (9J25003-MS1)

Prepared: 10/25/2009 07:30 Analyzed: 10/26/2009 00:32

Source: C910602-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	97		5.0	mg/L	50.0	50	94	80-120			
Sulfate as SO4	77		5.0	mg/L	50.0	28	97	80-120			

Matrix Spike Dup (9J25003-MSD1)

Prepared: 10/25/2009 07:30 Analyzed: 10/26/2009 00:48

Source: C910602-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 9J25003 - NO PREP

Matrix Spike Dup (9J25003-MSD1) Continued

Prepared: 10/25/2009 07:30 Analyzed: 10/26/2009 00:48

Source: C910602-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	97		5.0	mg/L	50.0	50	95	80-120	0.3	15	
Sulfate as SO ₄	77		5.0	mg/L	50.0	28	97	80-120	0.2	15	

Batch 9J25005 - NO PREP

Blank (9J25005-BLK1)

Prepared: 10/25/2009 11:29 Analyzed: 10/25/2009 13:54

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	8.3	U	15	mg/L							

LCS (9J25005-BS1)

Prepared: 10/25/2009 11:29 Analyzed: 10/25/2009 13:55

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	99		15	mg/L	100		99	80-120			

Matrix Spike (9J25005-MS1)

Prepared: 10/25/2009 11:29 Analyzed: 10/25/2009 13:57

Source: C910605-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	150		15	mg/L	100	68	81	80-120			

Matrix Spike Dup (9J25005-MSD1)

Prepared: 10/25/2009 11:29 Analyzed: 10/25/2009 13:57

Source: C910605-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	150		15	mg/L	100	68	83	80-120	1	25	

Batch 9J26025 - NO PREP

Blank (9J26025-BLK1)

Prepared & Analyzed: 10/26/2009 16:00

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.031	U	0.10	mg/L							

LCS (9J26025-BS1)

Prepared & Analyzed: 10/26/2009 16:00

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.41		0.10	mg/L	0.401		101	80-120			

Matrix Spike (9J26025-MS1)

Prepared & Analyzed: 10/26/2009 16:00

Source: C912260-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.36		0.10	mg/L	0.401	-0.009	91	80-120			

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 9J26025 - NO PREP

Matrix Spike Dup (9J26025-MSD1)

Prepared & Analyzed: 10/26/2009 16:00

Source: C912260-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.36		0.10	mg/L	0.401	-0.009	91	80-120	0.6	25	

Batch 9J29002 - NO PREP

Blank (9J29002-BLK1)

Prepared: 10/29/2009 07:42 Analyzed: 10/29/2009 08:32

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	8.3	U	15	mg/L							

LCS (9J29002-BS1)

Prepared: 10/29/2009 07:42 Analyzed: 10/29/2009 08:33

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	100		15	mg/L	100		101	80-120			

Matrix Spike (9J29002-MS1)

Prepared: 10/29/2009 07:42 Analyzed: 10/29/2009 08:35

Source: C910608-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	110		15	mg/L	100	32	82	80-120			

Matrix Spike Dup (9J29002-MSD1)

Prepared: 10/29/2009 07:42 Analyzed: 10/29/2009 08:36

Source: C910608-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	110		15	mg/L	100	32	74	80-120	7	25	QM-07

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 9J21008 - NO PREP ANALYTIX

Blank (9J21008-BLK1)

Prepared: 10/21/2009 10:53 Analyzed: 10/23/2009 09:18

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	0.780	U	2.50	mg/L							
Ethane	0.0004	U	0.002	mg/L							
Ethene	0.0004	U	0.002	mg/L							
Methane	0.0002	U	0.001	mg/L							

LCS (9J21008-BS1)

Prepared: 10/21/2009 10:53 Analyzed: 10/23/2009 09:26

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	23.2		2.50	mg/L	26.3		88	71-119		10	
Ethane	0.181		0.002	mg/L	0.179		101	75-123		14	
Ethene	0.160		0.002	mg/L	0.167		96	72-131		12	
Methane	0.0970		0.001	mg/L	0.0958		101	74-116		18	

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 9J21008 - NO PREP ANALYTIX

Matrix Spike (9J21008-MS1)

Prepared: 10/21/2009 10:53 Analyzed: 10/23/2009 09:36

Source: C911892-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	136		2.50	mg/L	26.3	110	99	71-119		10	QM-02
Ethane	0.173		0.002	mg/L	0.179	0.0004 U	97	75-123		14	
Ethene	0.151		0.002	mg/L	0.167	0.0004 U	91	72-131		12	
Methane	2.05		0.001	mg/L	0.0958	1.06	NR	74-116		18	QM-02

Matrix Spike Dup (9J21008-MSD1)

Prepared: 10/21/2009 10:53 Analyzed: 10/23/2009 09:40

Source: C911892-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	145		2.50	mg/L	26.3	110	134	71-119	7	10	QM-02
Ethane	0.181		0.002	mg/L	0.179	0.0004 U	101	75-123	5	14	
Ethene	0.159		0.002	mg/L	0.167	0.0004 U	95	72-131	5	12	
Methane	2.12		0.001	mg/L	0.0958	1.06	NR	74-116	4	18	QM-02

Volatile Fatty Acids by HPLC - Quality Control

Batch 9J20013 - NO PREP ANALYTIX

Blank (9J20013-BLK1)

Prepared: 10/20/2009 10:16 Analyzed: 10/21/2009 12:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	0.071	U	0.50	mg/L							
Butyric Acid	0.16	U	0.50	mg/L							
Hexanoic Acid	0.32	U	0.50	mg/L							
HIBA (2-Hydroxyisobutyric Acid)	0.098	U	0.50	mg/L							
iso-Hexanoic Acid	0.41	U	0.50	mg/L							
iso-Pentanoic Acid	0.13	U	0.50	mg/L							
Lactic Acid	0.088	U	0.50	mg/L							
Pentanoic Acid	0.18	U	0.50	mg/L							
Propionic Acid	0.054	U	0.50	mg/L							
Pyruvic Acid	0.020	U	0.50	mg/L							
Surrogate: Trimethylacetic acid	63			mg/L	50.0		126	80-124			QA-03

LCS (9J20013-BS1)

Prepared: 10/20/2009 10:16 Analyzed: 10/21/2009 13:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	18		0.50	mg/L	20.0		91	73-125		10	
Butyric Acid	20		0.50	mg/L	20.0		101	80-120		10	
Hexanoic Acid	21		0.50	mg/L	20.0		104	78-120		34	
HIBA (2-Hydroxyisobutyric Acid)	18		0.50	mg/L	20.0		88	80-120		15	
iso-Hexanoic Acid	21		0.50	mg/L	20.0		103	80-120		15	
iso-Pentanoic Acid	17		0.50	mg/L	20.0		85	78-120		15	
Lactic Acid	27		0.50	mg/L	20.0		134	56-154		19	
Pentanoic Acid	20		0.50	mg/L	20.0		100	77-120		10	
Propionic Acid	20		0.50	mg/L	20.0		99	80-120		10	
Pyruvic Acid	18		0.50	mg/L	20.0		88	37-142		10	

QUALITY CONTROL

Volatile Fatty Acids by HPLC - Quality Control

Batch 9J20013 - NO PREP ANALYTIX

LCS (9J20013-BS1) Continued

Prepared: 10/20/2009 10:16 Analyzed: 10/21/2009 13:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Trimethylacetic acid	59			mg/L	50.0		118	80-124			

Matrix Spike (9J20013-MS1)

Prepared: 10/20/2009 10:16 Analyzed: 10/21/2009 14:07

Source: C911892-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	43		0.50	mg/L	20.0	25	92	73-125		10	
Butyric Acid	19		0.50	mg/L	20.0	0.16 U	97	80-120		10	
Hexanoic Acid	20		0.50	mg/L	20.0	0.32 U	102	78-120		34	
HIBA (2-Hydroxyisobutyric Acid)	22		0.50	mg/L	20.0	3.4	95	80-120		15	
Iso-Hexanoic Acid	19		0.50	mg/L	20.0	0.41 U	94	80-120		15	
Iso-Pentanoic Acid	17		0.50	mg/L	20.0	0.13 U	84	78-120		15	
Lactic Acid	27		0.50	mg/L	20.0	0.088 U	135	56-154		19	
Pentanoic Acid	21		0.50	mg/L	20.0	0.18 U	103	77-120		10	
Propionic Acid	21		0.50	mg/L	20.0	0.054 U	105	80-120		10	
Pyruvic Acid	19		0.50	mg/L	20.0	0.020 U	97	37-142		10	
Surrogate: Trimethylacetic acid	60			mg/L	50.0		119	80-124			

Matrix Spike Dup (9J20013-MSD1)

Prepared: 10/20/2009 10:16 Analyzed: 10/21/2009 15:09

Source: C911892-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	41		0.50	mg/L	20.0	25	79	73-125	6	10	
Butyric Acid	20		0.50	mg/L	20.0	0.16 U	98	80-120	0.7	10	
Hexanoic Acid	22		0.50	mg/L	20.0	0.32 U	111	78-120	8	34	
HIBA (2-Hydroxyisobutyric Acid)	20		0.50	mg/L	20.0	3.4	84	80-120	10	15	
Iso-Hexanoic Acid	19		0.50	mg/L	20.0	0.41 U	96	80-120	1	15	
Iso-Pentanoic Acid	17		0.50	mg/L	20.0	0.13 U	83	78-120	1	15	
Lactic Acid	25		0.50	mg/L	20.0	0.088 U	124	56-154	9	19	
Pentanoic Acid	21		0.50	mg/L	20.0	0.18 U	105	77-120	2	10	
Propionic Acid	22		0.50	mg/L	20.0	0.054 U	111	80-120	6	10	
Pyruvic Acid	19		0.50	mg/L	20.0	0.020 U	97	37-142	0.1	10	
Surrogate: Trimethylacetic acid	60			mg/L	50.0		119	80-124			

Batch 9J23006 - NO PREP ANALYTIX

Blank (9J23006-BLK1)

Prepared: 10/23/2009 09:07 Analyzed: 10/23/2009 11:05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	0.071	U	0.50	mg/L							
Butyric Acid	0.16	U	0.50	mg/L							
Hexanoic Acid	0.32	U	0.50	mg/L							
HIBA (2-Hydroxyisobutyric Acid)	0.098	U	0.50	mg/L							
Iso-Hexanoic Acid	0.41	U	0.50	mg/L							
Iso-Pentanoic Acid	0.13	U	0.50	mg/L							
Lactic Acid	0.088	U	0.50	mg/L							
Pentanoic Acid	0.18	U	0.50	mg/L							

QUALITY CONTROL

Volatile Fatty Acids by HPLC - Quality Control

Batch 9J23006 - NO PREP ANALYTIX

Blank (9J23006-BLK1) Continued

Prepared: 10/23/2009 09:07 Analyzed: 10/23/2009 11:05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Propionic Acid	0.054	U	0.50	mg/L							
Pyruvic Acid	0.020	U	0.50	mg/L							
Surrogate: Trimethylacetic acid	66			mg/L	50.0		131	80-124			QA-03

LCS (9J23006-BS1)

Prepared: 10/23/2009 09:07 Analyzed: 10/23/2009 11:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	17		0.50	mg/L	20.0		86	73-125			
Butyric Acid	21		0.50	mg/L	20.0		105	80-120			
Hexanoic Acid	19		0.50	mg/L	20.0		93	78-120			
HIBA (2-Hydroxyisobutyric Acid)	18		0.50	mg/L	20.0		91	80-120			
iso-Hexanoic Acid	18		0.50	mg/L	20.0		90	80-120			
iso-Pentanoic Acid	20		0.50	mg/L	20.0		101	78-120			
Lactic Acid	25		0.50	mg/L	20.0		123	56-154			
Pentanoic Acid	19		0.50	mg/L	20.0		94	77-120			
Propionic Acid	19		0.50	mg/L	20.0		97	80-120			
Pyruvic Acid	16		0.50	mg/L	20.0		81	37-142			
Surrogate: Trimethylacetic acid	61			mg/L	50.0		122	80-124			

Matrix Spike (9J23006-MS1)

Prepared: 10/23/2009 09:07 Analyzed: 10/23/2009 12:51

Source: C912221-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	17		0.50	mg/L	20.0	0.64	84	73-125			
Butyric Acid	21		0.50	mg/L	20.0	0.16 U	105	80-120			
Hexanoic Acid	19		0.50	mg/L	20.0	0.32 U	95	78-120			
HIBA (2-Hydroxyisobutyric Acid)	17		0.50	mg/L	20.0	0.098 U	85	80-120			
iso-Hexanoic Acid	19		0.50	mg/L	20.0	0.41 U	93	80-120			
iso-Pentanoic Acid	18		0.50	mg/L	20.0	0.13 U	92	78-120			
Lactic Acid	26		0.50	mg/L	20.0	0.088 U	129	56-154			
Pentanoic Acid	19		0.50	mg/L	20.0	0.18 U	96	77-120			
Propionic Acid	20		0.50	mg/L	20.0	0.054 U	99	80-120			
Pyruvic Acid	16		0.50	mg/L	20.0	0.020 U	82	37-142			
Surrogate: Trimethylacetic acid	62			mg/L	50.0		124	80-124			

Matrix Spike Dup (9J23006-MSD1)

Prepared: 10/23/2009 09:07 Analyzed: 10/23/2009 13:54

Source: C912221-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	17		0.50	mg/L	20.0	0.64	84	73-125	0.2	10	
Butyric Acid	20		0.50	mg/L	20.0	0.16 U	100	80-120	5	10	
Hexanoic Acid	19		0.50	mg/L	20.0	0.32 U	95	78-120	0.9	34	
HIBA (2-Hydroxyisobutyric Acid)	18		0.50	mg/L	20.0	0.098 U	91	80-120	7	15	
iso-Hexanoic Acid	21		0.50	mg/L	20.0	0.41 U	104	80-120	11	15	
iso-Pentanoic Acid	19		0.50	mg/L	20.0	0.13 U	94	78-120	2	15	
Lactic Acid	26		0.50	mg/L	20.0	0.088 U	131	56-154	1	19	

QUALITY CONTROL

Volatile Fatty Acids by HPLC - Quality Control

Batch 9J23006 - NO PREP ANALYTIX

Matrix Spike Dup (9J23006-MSD1) Continued

Prepared: 10/23/2009 09:07 Analyzed: 10/23/2009 13:54

Source: C912221-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Pentanoic Acid	19		0.50	mg/L	20.0	0.18 U	95	77-120	1	10	
Propionic Acid	19		0.50	mg/L	20.0	0.054 U	94	80-120	4	10	
Pyruvic Acid	16		0.50	mg/L	20.0	0.020 U	82	37-142	0.1	10	
Surrogate: Trimethylacetic acid	62			mg/L	50.0		124	80-124			

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 9J21019 - NO PREP

Blank (9J21019-BLK1)

Prepared: 10/21/2009 15:00 Analyzed: 10/21/2009 15:17

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	0.32	U	1.0	mg/L							

LCS (9J21019-BS1)

Prepared: 10/21/2009 15:00 Analyzed: 10/21/2009 15:17

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	38		1.0	mg/L	41.6		91	85-115			

Matrix Spike (9J21019-MS1)

Prepared: 10/21/2009 15:00 Analyzed: 10/21/2009 15:17

Source: A904691-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	38		1.0	mg/L	40.0	0.74	93	85-115			

Matrix Spike Dup (9J21019-MSD1)

Prepared: 10/21/2009 15:00 Analyzed: 10/21/2009 15:17

Source: A904691-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	39		1.0	mg/L	40.0	0.74	95	85-115	2	21	

Batch 9J28004 - NO PREP

Blank (9J28004-BLK1)

Prepared: 10/28/2009 10:00 Analyzed: 10/28/2009 13:24

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	0.32	U	1.0	mg/L							

LCS (9J28004-BS1)

Prepared: 10/28/2009 10:00 Analyzed: 10/28/2009 13:24

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	35		1.0	mg/L	41.6		85	85-115			

Matrix Spike (9J28004-MS1)

Prepared: 10/28/2009 10:00 Analyzed: 10/28/2009 13:24

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 9J28004 - NO PREP

Matrix Spike (9J28004-MS1) Continued

Prepared: 10/28/2009 10:00 Analyzed: 10/28/2009 13:24

Source: A905128-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	39		1.0	mg/L	40.0	0.32 U	97	85-115			

Matrix Spike Dup (9J28004-MSD1)

Prepared: 10/28/2009 10:00 Analyzed: 10/28/2009 13:24

Source: A905128-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	39		1.0	mg/L	40.0	0.32 U	97	85-115	0.5	21	

Batch 9J28016 - NO PREP

Blank (9J28016-BLK1)

Prepared: 10/28/2009 16:00 Analyzed: 10/28/2009 23:05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	0.32	U	1.0	mg/L							

LCS (9J28016-BS1)

Prepared: 10/28/2009 16:00 Analyzed: 10/28/2009 23:05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	36		1.0	mg/L	41.6		86	85-115			

Matrix Spike (9J28016-MS1)

Prepared: 10/28/2009 16:00 Analyzed: 10/28/2009 23:05

Source: A905296-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	36		1.0	mg/L	40.0	1.5	86	85-115			

Matrix Spike Dup (9J28016-MSD1)

Prepared: 10/28/2009 16:00 Analyzed: 10/28/2009 23:05

Source: A905296-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	34		1.0	mg/L	40.0	1.5	82	85-115	5	21	QM-07

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
QA-03	Surrogate recovery outside acceptance limits
QM-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

10775 Central Port Ct
Orlando, FL 32824
(407) 836-5314 Fax (407) 850-4045

08/10/2019 10:17:11 AM

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ENVIRONME

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CASEY J. HUGHES, Editor, *Jot Italic*



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Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 1 of 8
Lab Proj #: P0910377
Report Date: 11/03/09
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

Laboratory Results

Total pages in data package: 9

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0910377-01	II-1
P0910377-02	II-2
P0910377-03	II-2B
P0910377-04	II-7
P0910377-05	II-7B
P0910377-06	II-9
P0910377-07	MW-14

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo **Date:** 1-25-10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 2 of 8
Lab Proj #: P0910377
Report Date: 11/03/09
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-1	Vapor	P0910377-01	16 Oct. 09 10:50	23 Oct. 09 9:36		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	0.680	0.600	nM	AM20GAX	10/29/09	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 3 of 8
Lab Proj #: P0910377
Report Date: 11/03/09
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-2	Vapor	P0910377-02	16 Oct. 09 15:00	23 Oct. 09 9:36		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	1.200	0.600	nM	AM20GAX	10/29/09	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 4 of 8
Lab Proj #: P0910377
Report Date: 11/03/09
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-2B	Vapor	P0910377-03	20 Oct. 09 15:45	23 Oct. 09 9:36		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	1.400	0.600	nM	AM20GAX	10/30/09	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 5 of 8
Lab Proj #: P0910377
Report Date: 11/03/09
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-7	Vapor	P0910377-04	19 Oct. 09 12:45	23 Oct. 09 9:36		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	2.600	0.600	nM	AM20GAX	10/30/09	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 6 of 8
Lab Proj #: P0910377
Report Date: 11/03/09
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-7B	Vapor	P0910377-05	19 Oct. 09 10:10	23 Oct. 09 9:36		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	1.000	0.600	nM	AM20GAX	10/30/09	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 7 of 8
Lab Proj #: P0910377
Report Date: 11/03/09
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-9	Vapor	P0910377-06	20 Oct. 09 12:05	23 Oct. 09 9:36		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	1.100	0.600	nM	AM20GAX	10/30/09	sl

Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 8 of 8
Lab Proj #: P0910377
Report Date: 11/03/09
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-14	Vapor	P0910377-07	20 Oct. 09 18:00	23 Oct. 09 9:36		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Hydrogen	1.000	0.600	nM	AM20GAX	10/30/09	sl





Microseeps
Lab. Proj. # _____

CHAIN - OF - CUSTODY RECORD

00910377

Microseeps
COC cont. # _____

210

Phone: (412) 826-5245

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238

Fax No.: (412) 826-3433

Company : S&ME Inc.
Co. Address : 3718 Old Battleground Road, Greensboro, NC
Phone # : (336) 288-7180 Fax # : (336) 288-8980
Proj. Manager : Connel Ware
Proj. Name/Number : White Street LE-MNA Monitoring / 1584-98-081
Sampler's signature : [Signature]

Cooler Temp. _____

Parameters Requested

Results to : Connel Ware
S&ME, Inc.

Invoice to : _____

Sample ID	Sample Description	Sample Type		Date	Time	Dissolved Hydrogen	Parameters Requested										Remarks
		Water	Vapor / Solid														
II-1	Gas vial		X	10/16/09	1050	1	X										
II-2	"		X	10/16/09	1500	1	X										
II-2B	"		X	10/21/09	1545	1	X										
II-7	"		X	10/19/09	1245	1	X										
II-7B	"		X	10/19/09	1010	1	X										
II-9	"		X	10/20/09	1205	1	X										
MW-14	"		X	10/20/09	1800	1	X										

Relinquished by : <u>[Signature]</u>	Company : <u>S&ME Inc.</u>	Date : <u>10/21/09</u>	Time : _____	Received by : <u>[Signature]</u>	Company : <u>[Signature]</u>	Date : <u>10/23</u>	Time : <u>muw</u>
Relinquished by : _____	Company : _____	Date : _____	Time : _____	Received by : _____	Company : _____	Date : _____	Time : _____
Relinquished by : _____	Company : _____	Date : _____	Time : _____	Received by : _____	Company : _____	Date : _____	Time : _____

WHITE COPY : Accompany Samples

YELLOW COPY : Laboratory File

PINK COPY : Submitter

Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090

FAX: 919.467.3515



www.encolabs.com

Friday, January 29, 2010

S&ME, Inc. (SM004)

Attn: Connel Ware

3718 Old Battleground Rd.

Greensboro, NC 27410

RE: Laboratory Results for

Project Number: [none], Project Name/Desc: White Street Landfill MNA

ENCO Workorder: C915317

Dear Connel Ware,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Friday, January 15, 2010.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Chuck Smith

Project Manager

Enclosure(s)

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: MW-14		Lab ID: C915317-01		Sampled: 01/13/10 15:25		Received: 01/15/10 13:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	02/10/10	01/19/10	09:25	1/20/2010 00:32			
EPA 310.2	01/27/10	01/19/10	13:30	1/19/2010 17:36			
EPA 353.2	02/10/10	01/27/10	09:05	1/27/2010 09:05			
EPA 8260B	01/27/10	01/22/10	08:51	1/23/2010 08:55			
RSK 175	01/27/10	01/25/10	10:32	1/25/2010 11:33			
SM18 4500-S D	01/20/10	01/18/10	11:37	1/18/2010 11:51			
SM18 5310B	02/10/10	01/26/10	13:39	1/26/2010 14:30			
SM4500-CI/E	02/10/10	01/19/10	13:33	1/19/2010 15:03			
Volatile Fatty Acids	01/27/10	01/20/10	08:47	1/21/2010 15:51			

Client ID: II-1		Lab ID: C915317-02		Sampled: 01/13/10 09:45		Received: 01/15/10 13:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	02/10/10	01/19/10	09:25	1/20/2010 00:49			
EPA 310.2	01/27/10	01/19/10	13:30	1/19/2010 17:39			
EPA 353.2	02/10/10	01/27/10	09:05	1/27/2010 09:05			
EPA 8260B	01/27/10	01/22/10	08:51	1/23/2010 09:23			
RSK 175	01/27/10	01/25/10	10:32	1/25/2010 11:36			
SM18 4500-S D	01/20/10	01/18/10	11:37	1/18/2010 11:51			
SM18 5310B	02/10/10	01/26/10	13:39	1/26/2010 14:30			
Volatile Fatty Acids	01/27/10	01/20/10	08:47	1/21/2010 16:53			

Client ID: II-1		Lab ID: C915317-02RE1		Sampled: 01/13/10 09:45		Received: 01/15/10 13:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
RSK 175	01/27/10	01/25/10	10:32	1/25/2010 12:20			
SM4500-CI/E	02/10/10	01/19/10	13:33	1/19/2010 16:55			

Client ID: II-2		Lab ID: C915317-03		Sampled: 01/12/10 09:50		Received: 01/15/10 13:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	02/09/10	01/19/10	09:25	1/20/2010 01:06			
EPA 310.2	01/26/10	01/19/10	13:30	1/19/2010 17:40			
EPA 353.2	02/09/10	01/27/10	09:05	1/27/2010 09:05			
EPA 8260B	01/26/10	01/23/10	07:39	1/23/2010 12:41			
RSK 175	01/26/10	01/25/10	10:32	1/25/2010 11:40			
SM18 4500-S D	01/19/10	01/18/10	11:37	1/18/2010 11:51			
SM18 5310B	02/09/10	01/26/10	13:39	1/26/2010 14:30			
SM4500-CI/E	02/09/10	01/19/10	13:33	1/19/2010 15:07			
Volatile Fatty Acids	01/26/10	01/20/10	08:47	1/21/2010 17:56			

Client ID: II-28		Lab ID: C915317-04		Sampled: 01/14/10 09:05		Received: 01/15/10 13:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	02/11/10	01/19/10	09:07	1/19/2010 17:36			
EPA 310.2	01/28/10	01/19/10	13:30	1/19/2010 17:41			
EPA 353.2	02/11/10	01/27/10	09:05	1/27/2010 09:05			
EPA 8260B	01/28/10	01/23/10	07:39	1/23/2010 14:39			
RSK 175	01/28/10	01/25/10	10:32	1/25/2010 11:44			
SM18 4500-S D	01/21/10	01/18/10	14:56	1/18/2010 15:07			
SM18 5310B	02/11/10	01/26/10	13:39	1/26/2010 14:30			
SM4500-Cl/E	02/11/10	01/19/10	13:33	1/19/2010 15:08			
Volatile Fatty Acids	01/28/10	01/20/10	08:47	1/21/2010 18:59			

Client ID: II-28		Lab ID: C915317-04RE1		Sampled: 01/14/10 09:05		Received: 01/15/10 13:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
RSK 175	01/28/10	01/25/10 10:32		1/25/2010 12:23			

Client ID: II-7		Lab ID: C915317-05		Sampled: 01/13/10 13:30		Received: 01/15/10 13:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	02/10/10	01/19/10	09:07	1/19/2010 17:53			
EPA 310.2	01/27/10	01/19/10	13:30	1/19/2010 17:42			
EPA 353.2	02/10/10	01/27/10	09:05	1/27/2010 09:05			
EPA 8260B	01/27/10	01/23/10	07:39	1/23/2010 13:40			
RSK 175	01/27/10	01/25/10	10:32	1/25/2010 11:48			
SM18 4500-S D	01/20/10	01/18/10	11:37	1/18/2010 11:51			
SM18 5310B	02/10/10	01/26/10	13:39	1/26/2010 14:30			
SM4500-Cl/E	02/10/10	01/19/10	13:33	1/19/2010 15:08			
Volatile Fatty Acids	01/27/10	01/20/10	08:47	1/21/2010 20:01			

Client ID: II-7		Lab ID: C915317-05RE1		Sampled: 01/13/10 13:30		Received: 01/15/10 13:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
RSK 175	01/27/10	01/25/10	10:32	1/25/2010 12:27			

Client ID: II-7B		Lab ID: C915317-06		Sampled: 01/13/10 12:10		Received: 01/15/10 13:00	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 310.2	01/27/10	01/19/10	13:30	1/19/2010 17:43			
EPA 353.2	02/10/10	01/27/10	09:05	1/27/2010 09:05			
EPA 8260B	01/27/10	01/23/10	07:39	1/23/2010 14:10			
RSK 175	01/27/10	01/25/10	10:32	1/25/2010 11:51			
SM18 4500-S D	01/20/10	01/18/10	11:37	1/18/2010 11:51			
SM18 5310B	02/10/10	01/26/10	13:39	1/26/2010 14:30			
SM4500-Cl/E	02/10/10	01/19/10	13:33	1/19/2010 15:09			
Volatile Fatty Acids	01/27/10	01/20/10	08:47	1/21/2010 21:04			

Client ID: II-7B	Lab ID: C915317-06RE1	Sampled: 01/13/10 12:10	Received: 01/15/10 13:00
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	02/10/10	01/19/10 09:07	1/20/2010 04:59

Client ID: II-9	Lab ID: C915317-07	Sampled: 01/14/10 10:40	Received: 01/15/10 13:00
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	02/11/10	01/19/10 09:07	1/19/2010 18:26
EPA 310.2	01/28/10	01/19/10 13:30	1/19/2010 17:44
EPA 353.2	02/11/10	01/27/10 09:05	1/27/2010 09:05
EPA 8260B	01/28/10	01/23/10 07:39	1/23/2010 17:06
RSK 175	01/28/10	01/25/10 10:32	1/25/2010 11:55
SM18 4500-S D	01/21/10	01/18/10 14:56	1/18/2010 15:07
SM18 5310B	02/11/10	01/26/10 13:39	1/26/2010 14:30
SM4500-CI/E	02/11/10	01/19/10 13:33	1/19/2010 15:10
Volatile Fatty Acids	01/28/10	01/20/10 08:47	1/21/2010 22:06

Client ID: Trip Blank	Lab ID: C915317-08	Sampled: 01/12/10 09:50	Received: 01/15/10 13:00
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	01/26/10	01/23/10 07:39	1/23/2010 13:11

NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID:	MW-14	Lab ID:	C915317-01
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	71.4		1	0.780	2.50	NE	mg/L	RSK 175	
Chloride	2.1	J	1	1.2	5.0	NE	mg/L	SM4500-Cl/E	
Methane	0.001		1	0.0002	0.001	NE	mg/L	RSK 175	
Sulfate as SO ₄	1.2	J	1	0.18	5.0	250	mg/L	EPA 300.0	
Total Alkalinity	23		1	8.0	15	NE	mg/L	EPA 310.2	

Client ID:	II-1	Lab ID:	C915317-02
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Benzene	0.99	J	1	0.20	1.0	1	ug/L	EPA 8260B	
cis-1,2-Dichloroethene	2.2	J	1	0.36	1.0	5	ug/L	EPA 8260B	
Lactic Acid	6.7		1	0.088	0.50	NE	mg/L	Volatile Fatty Acids	
Methane	0.0009	J	1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.025	J	1	0.0056	0.10	10	mg/L	EPA 353.2	
Propionic Acid	18		1	0.054	0.50	NE	mg/L	Volatile Fatty Acids	
Sulfate as SO ₄	18	J	1	0.18	5.0	250	mg/L	EPA 300.0	
Total Alkalinity	390	D	2	16	30	NE	mg/L	EPA 310.2	
Total Organic Carbon	30		1	0.32	1.0	NE	mg/L	SM18 5310B	
Trichloroethene	0.41	J	1	0.38	1.0	1	ug/L	EPA 8260B	

Client ID:	II-1	Lab ID:	C915317-02RE1
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	525	D	10	7.80	25.0	NE	mg/L	RSK 175	
Chloride	520	D	5	6.0	25	NE	mg/L	SM4500-Cl/E	

Client ID:	II-2	Lab ID:	C915317-03
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Benzene	1.8		1	0.20	1.0	1	ug/L	EPA 8260B	
Carbon dioxide	131		1	0.780	2.50	NE	mg/L	RSK 175	
Chloride	13		1	1.2	5.0	NE	mg/L	SM4500-Cl/E	
cis-1,2-Dichloroethene	21		1	0.36	1.0	5	ug/L	EPA 8260B	
Methane	1.35		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.031	J	1	0.0056	0.10	10	mg/L	EPA 353.2	
Propionic Acid	0.85		1	0.054	0.50	NE	mg/L	Volatile Fatty Acids	
Pyruvic Acid	0.029	J	1	0.020	0.50	NE	mg/L	Volatile Fatty Acids	
Sulfate as SO ₄	25	J	1	0.18	5.0	250	mg/L	EPA 300.0	
Total Alkalinity	360	D	2	16	30	NE	mg/L	EPA 310.2	
Total Organic Carbon	1.5		1	0.32	1.0	NE	mg/L	SM18 5310B	
Trichloroethene	3.9		1	0.38	1.0	1	ug/L	EPA 8260B	
Vinyl chloride	5.7		1	0.30	1.0	1	ug/L	EPA 8260B	

Client ID:	II-2B	Lab ID:	C915317-04
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Benzene	1.2		1	0.20	1.0	1	ug/L	EPA 8260B	
Chloride	11		1	1.2	5.0	NE	mg/L	SM4500-Cl/E	
cis-1,2-Dichloroethene	17		1	0.36	1.0	5	ug/L	EPA 8260B	
Methane	0.384		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.032	J	1	0.0056	0.10	10	mg/L	EPA 353.2	
Sulfate as SO ₄	22	J	1	0.18	5.0	250	mg/L	EPA 300.0	



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Client ID: II-28 Lab ID: C915317-04

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Total Alkalinity	210	D	2	16	30	NE	mg/L	EPA 310.2	
Total Organic Carbon	2.6		1	0.32	1.0	NE	mg/L	SM18 5310B	
Trichloroethene	2.5		1	0.38	1.0	1	ug/L	EPA 8260B	
Vinyl chloride	4.0		1	0.30	1.0	1	ug/L	EPA 8260B	

Client ID: II-28 Lab ID: C915317-04RE1

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	260	D	10	7.80	25.0	NE	mg/L	RSK 175	

Client ID: II-7 Lab ID: C915317-05

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Benzene	0.79	J	1	0.20	1.0	1	ug/L	EPA 8260B	
Chloride	12		1	1.2	5.0	NE	mg/L	SM4500-Cl/E	
cis-1,2-Dichloroethene	3.9	J	1	0.36	1.0	5	ug/L	EPA 8260B	
Methane	0.055		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.27	J	1	0.0056	0.10	10	mg/L	EPA 353.2	
Pyruvic Acid	0.045	J	1	0.020	0.50	NE	mg/L	Volatile Fatty Acids	
Sulfate as SO4	11	J	1	0.18	5.0	250	mg/L	EPA 300.0	
Toluene	1.3		1	0.27	1.0	1	ug/L	EPA 8260B	
Total Alkalinity	83		1	8.0	15	NE	mg/L	EPA 310.2	
Total Organic Carbon	4.0		1	0.32	1.0	NE	mg/L	SM18 5310B	
Vinyl chloride	1.0		1	0.30	1.0	1	ug/L	EPA 8260B	

Client ID: II-7 Lab ID: C915317-05RE1

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	393	D	10	7.80	25.0	NE	mg/L	RSK 175	

Client ID: II-7B Lab ID: C915317-06

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	3.8	J	1	1.2	5.0	NE	mg/L	SM4500-Cl/E	
Methane	0.006		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.25	J	1	0.0056	0.10	10	mg/L	EPA 353.2	
Total Alkalinity	95		1	8.0	15	NE	mg/L	EPA 310.2	
Total Organic Carbon	2.5		1	0.32	1.0	NE	mg/L	SM18 5310B	

Client ID: II-7B Lab ID: C915317-06RE1

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Sulfate as SO4	100	JD	4	0.72	20	250	mg/L	EPA 300.0	

Client ID: II-9 Lab ID: C915317-07

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	201		1	0.780	2.50	NE	mg/L	RSK 175	
Chloride	6.5		1	1.2	5.0	NE	mg/L	SM4500-Cl/E	
cis-1,2-Dichloroethene	4.2	J	1	0.36	1.0	5	ug/L	EPA 8260B	
Methane	0.0009	J	1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.25	J	1	0.0056	0.10	10	mg/L	EPA 353.2	
Sulfate as SO4	51	J	1	0.18	5.0	250	mg/L	EPA 300.0	
Total Alkalinity	92		1	8.0	15	NE	mg/L	EPA 310.2	
Total Organic Carbon	4.1		1	0.32	1.0	NE	mg/L	SM18 5310B	

ANALYTICAL RESULTS

Description: MW-14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-01
Sampled: 01/13/10 15:25
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 08:55	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 08:55	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	01/23/10 08:55	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	01/23/10 08:55	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 08:55	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	01/23/10 08:55	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	01/23/10 08:55	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 08:55	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	01/23/10 08:55	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	01/23/10 08:55	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	01/23/10 08:55	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	01/23/10 08:55	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	45	1	50.0	90 %	51-122	0A22005	EPA 8260B	01/23/10 08:55	JKG	
Dibromofluoromethane	49	1	50.0	98 %	68-117	0A22005	EPA 8260B	01/23/10 08:55	JKG	
Toluene-d8	47	1	50.0	94 %	69-110	0A22005	EPA 8260B	01/23/10 08:55	JKG	

Description: MW-14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-01
Sampled: 01/13/10 15:25
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	2.1	J	mg/L	1	1.2	5.0	NE	SM4500-Cl/E	01/19/10 15:03	AJB	
Nitrate as N [14797-55-8] ^	0.0056	U	mg/L	1	0.0056	0.10	10	EPA 353.2	01/27/10 09:05	PEV	
Sulfate as SO4 [14808-79-8] ^	1.2	J	mg/L	1	0.18	5.0	250	EPA 300.0	01/20/10 00:32	AJB	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	01/18/10 11:51	AJB	
Total Alkalinity [471-34-1] ^	23		mg/L	1	8.0	15	NE	EPA 310.2	01/19/10 17:36	AJB	

Description: MW-14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-01
Sampled: 01/13/10 15:25
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	0.32	U	mg/L	1	0.32	1.0	NE	SM18 5310B	01/26/10 14:30	RSA	



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Description: MW-14

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-01

Sampled: 01/13/10 15:25

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	71.4		mg/L	1	0.780	2.50	NE	RSK 175	01/25/10 11:33	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:33	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:33	LAC	
Methane [74-82-8]	0.001		mg/L	1	0.0002	0.001	NE	RSK 175	01/25/10 11:33	LAC	

Description: MW-14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-01
Sampled: 01/13/10 15:25
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.071	U	mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	01/21/10 15:51	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	01/21/10 15:51	MEF	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	01/21/10 15:51	MEF	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	01/21/10 15:51	MEF	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	01/21/10 15:51	MEF	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	01/21/10 15:51	MEF	
Lactic Acid [50-21-5]	0.088	U	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	01/21/10 15:51	MEF	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	01/21/10 15:51	MEF	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	01/21/10 15:51	MEF	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	01/21/10 15:51	MEF	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	76	1	70.0	109 %	80-124	0A20001	Volatile Fatty Acids	01/21/10 15:51	MEF	

Description: II-1

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-02

Sampled: 01/13/10 09:45

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 09:23	JKG	
Benzene [71-43-2] ^	0.99	J	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 09:23	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	01/23/10 09:23	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	2.2	J	ug/L	1	0.36	1.0	5	EPA 8260B	01/23/10 09:23	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 09:23	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	01/23/10 09:23	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	01/23/10 09:23	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 09:23	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	01/23/10 09:23	JKG	
Trichloroethene [79-01-6] ^	0.41	J	ug/L	1	0.38	1.0	1	EPA 8260B	01/23/10 09:23	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	01/23/10 09:23	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	01/23/10 09:23	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	45	1	50.0	89 %	51-122	0A22005	EPA 8260B	01/23/10 09:23	JKG	
Dibromofluoromethane	48	1	50.0	96 %	68-117	0A22005	EPA 8260B	01/23/10 09:23	JKG	
Toluene-d8	47	1	50.0	94 %	69-110	0A22005	EPA 8260B	01/23/10 09:23	JKG	

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	520	D	mg/L	5	6.0	25	NE	SM4500-Cl/E	01/19/10 16:55	AJB	
Nitrate as N [14797-55-8] ^	0.025	J	mg/L	1	0.0056	0.10	10	EPA 353.2	01/27/10 09:05	PEV	
Sulfate as SO4 [14808-79-8] ^	18	J	mg/L	1	0.18	5.0	250	EPA 300.0	01/20/10 00:49	AJB	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	01/18/10 11:51	AJB	
Total Alkalinity [471-34-1] ^	390	D	mg/L	2	16	30	NE	EPA 310.2	01/19/10 17:39	AJB	

Description: II-1
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-02
Sampled: 01/13/10 09:45
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	30		mg/L	1	0.32	1.0	NE	SM18 5310B	01/26/10 14:30	RSA	

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	525	D	mg/L	10	7.80	25.0	NE	RSK 175	01/25/10 12:20	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:36	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:36	LAC	
Methane [74-82-8]	0.0009	J	mg/L	1	0.0002	0.001	NE	RSK 175	01/25/10 11:36	LAC	

Description: II-1

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-02

Sampled: 01/13/10 09:45

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.071	U	mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	01/21/10 16:53	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	01/21/10 16:53	MEF	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	01/21/10 16:53	MEF	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	4.0		mg/L	1	0.098	0.50		Volatile Fatty Acids	01/21/10 16:53	MEF	
iso-Hexanoic Acid [646-07-1]	1.1		mg/L	1	0.41	0.50		Volatile Fatty Acids	01/21/10 16:53	MEF	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	01/21/10 16:53	MEF	
Lactic Acid [50-21-5]	6.7		mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	01/21/10 16:53	MEF	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	01/21/10 16:53	MEF	
Propionic Acid [79-09-4]	18		mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	01/21/10 16:53	MEF	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	01/21/10 16:53	MEF	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	81	1	70.0	116 %	80-124	0A20001	Volatile Fatty Acids	01/21/10 16:53	MEF	

Description: II-2

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-03

Sampled: 01/12/10 09:50

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 12:41	JKG	
Benzene [71-43-2] ^	1.8		ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 12:41	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	01/23/10 12:41	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	21		ug/L	1	0.36	1.0	5	EPA 8260B	01/23/10 12:41	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 12:41	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	01/23/10 12:41	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	01/23/10 12:41	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 12:41	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	01/23/10 12:41	JKG	
Trichloroethene [79-01-6] ^	3.9		ug/L	1	0.38	1.0	1	EPA 8260B	01/23/10 12:41	JKG	
Vinyl chloride [75-01-4] ^	5.7		ug/L	1	0.30	1.0	1	EPA 8260B	01/23/10 12:41	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	01/23/10 12:41	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	47	1	50.0	93 %	51-122	0A23001	EPA 8260B	01/23/10 12:41	JKG	
Dibromofluoromethane	45	1	50.0	90 %	68-117	0A23001	EPA 8260B	01/23/10 12:41	JKG	
Toluene-d8	46	1	50.0	91 %	69-110	0A23001	EPA 8260B	01/23/10 12:41	JKG	

Description: II-2
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-03
Sampled: 01/12/10 09:50
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	13		mg/L	1	1.2	5.0	NE	SM4500-Cl/E	01/19/10 15:07	AJB	
Nitrate as N [14797-55-8] ^	0.031	J	mg/L	1	0.0056	0.10	10	EPA 353.2	01/27/10 09:05	PEV	
Sulfate as SO4 [14808-79-8] ^	25	J	mg/L	1	0.18	5.0	250	EPA 300.0	01/20/10 01:06	AJB	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	01/18/10 11:51	AJB	
Total Alkalinity [471-34-1] ^	360	D	mg/L	2	16	30	NE	EPA 310.2	01/19/10 17:40	AJB	

Description: II-2
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-03
Sampled: 01/12/10 09:50
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	1.5		mg/L	1	0.32	1.0	NE	SM18 5310B	01/26/10 14:30	RSA	



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Description: II-2

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-03

Sampled: 01/12/10 09:50

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Dissolved Gases by GC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Carbon dioxide [124-38-9]	131		mg/L	1	0.780	2.50	NE	RSK 175	01/25/10 11:40	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:40	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:40	LAC	
Methane [74-82-8]	1.35		mg/L	1	0.0002	0.001	NE	RSK 175	01/25/10 11:40	LAC	

Description: II-2

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-03

Sampled: 01/12/10 09:50

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.071	U	mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	01/21/10 17:56	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	01/21/10 17:56	MEF	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	01/21/10 17:56	MEF	
HiBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	01/21/10 17:56	MEF	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	01/21/10 17:56	MEF	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	01/21/10 17:56	MEF	
Lactic Acid [50-21-5]	0.088	U	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	01/21/10 17:56	MEF	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	01/21/10 17:56	MEF	
Propionic Acid [79-09-4]	0.85		mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	01/21/10 17:56	MEF	
Pyruvic Acid [127-17-3]	0.029	J	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	01/21/10 17:56	MEF	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	76	1	70.0	108 %	80-124	0A20001	Volatile Fatty Acids	01/21/10 17:56	MEF	

Description: II-2B

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-04

Sampled: 01/14/10 09:05

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 14:39	JKG	
Benzene [71-43-2] ^	1.2		ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 14:39	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	01/23/10 14:39	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	17		ug/L	1	0.36	1.0	5	EPA 8260B	01/23/10 14:39	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 14:39	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	01/23/10 14:39	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	01/23/10 14:39	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 14:39	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	01/23/10 14:39	JKG	
Trichloroethene [79-01-6] ^	2.5		ug/L	1	0.38	1.0	1	EPA 8260B	01/23/10 14:39	JKG	
Vinyl chloride [75-01-4] ^	4.0		ug/L	1	0.30	1.0	1	EPA 8260B	01/23/10 14:39	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	01/23/10 14:39	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	51	1	50.0	102 %	51-122	0A23001	EPA 8260B	01/23/10 14:39	JKG	
Dibromofluoromethane	50	1	50.0	101 %	68-117	0A23001	EPA 8260B	01/23/10 14:39	JKG	
Toluene-d8	50	1	50.0	100 %	69-110	0A23001	EPA 8260B	01/23/10 14:39	JKG	

Description: II-2B
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-04
Sampled: 01/14/10 09:05
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	11		mg/L	1	1.2	5.0	NE	SM4500-Cl/E	01/19/10 15:08	AJB	
Nitrate as N [14797-55-8] ^	0.032	J	mg/L	1	0.0056	0.10	10	EPA 353.2	01/27/10 09:05	PEV	
Sulfate as SO4 [14808-79-8] ^	22	J	mg/L	1	0.18	5.0	250	EPA 300.0	01/19/10 17:36	AJB	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	01/18/10 15:07	AJB	
Total Alkalinity [471-34-1] ^	210	D	mg/L	2	16	30	NE	EPA 310.2	01/19/10 17:41	AJB	



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Description: II-2B

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-04

Sampled: 01/14/10 09:05

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	2.6		mg/L	1	0.32	1.0	NE	SM18 5310B	01/26/10 14:30	RSA	

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	260	D	mg/L	10	7.80	25.0	NE	RSK 175	01/25/10 12:23	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:44	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:44	LAC	
Methane [74-82-8]	0.384		mg/L	1	0.0002	0.001	NE	RSK 175	01/25/10 11:44	LAC	

Description: II-2B

Lab Sample ID: C915317-04

Received: 01/15/10 13:00

Matrix: Ground Water

Sampled: 01/14/10 09:05

Work Order: C915317

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Fatty Acids by HPLC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Acetic Acid [64-19-7]	0.071	U	mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	01/21/10 18:59	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	01/21/10 18:59	MEF	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	01/21/10 18:59	MEF	
HIHA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	01/21/10 18:59	MEF	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	01/21/10 18:59	MEF	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	01/21/10 18:59	MEF	
Lactic Acid [50-21-5]	0.088	U	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	01/21/10 18:59	MEF	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	01/21/10 18:59	MEF	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	01/21/10 18:59	MEF	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	01/21/10 18:59	MEF	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Trimethylacetic acid	75	1	70.0	107 %	80-124	0A20001	Volatile Fatty Acids	01/21/10 18:59	MEF	

Description: II-7

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-05

Sampled: 01/13/10 13:30

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 13:40	JKG	
Benzene [71-43-2] ^	0.79	J	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 13:40	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	01/23/10 13:40	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	3.9	J	ug/L	1	0.36	1.0	5	EPA 8260B	01/23/10 13:40	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 13:40	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	01/23/10 13:40	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	01/23/10 13:40	JKG	
Toluene [108-88-3] ^	1.3		ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 13:40	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	01/23/10 13:40	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	01/23/10 13:40	JKG	
Vinyl chloride [75-01-4] ^	1.0		ug/L	1	0.30	1.0	1	EPA 8260B	01/23/10 13:40	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	01/23/10 13:40	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	48	1	50.0	96 %	51-122	0A23001	EPA 8260B	01/23/10 13:40	JKG	
Dibromofluoromethane	48	1	50.0	96 %	68-117	0A23001	EPA 8260B	01/23/10 13:40	JKG	
Toluene-d8	49	1	50.0	97 %	69-110	0A23001	EPA 8260B	01/23/10 13:40	JKG	

Description: II-7
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-05
Sampled: 01/13/10 13:30
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	12		mg/L	1	1.2	5.0	NE	SM4500-Cl/E	01/19/10 15:08	AJB	
Nitrate as N [14797-55-8] ^	0.27	J	mg/L	1	0.0056	0.10	10	EPA 353.2	01/27/10 09:05	PEV	
Sulfate as SO4 [14808-79-8] ^	11	J	mg/L	1	0.18	5.0	250	EPA 300.0	01/19/10 17:53	AJB	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	01/18/10 11:51	AJB	
Total Alkalinity [471-34-1] ^	83		mg/L	1	8.0	15	NE	EPA 310.2	01/19/10 17:42	AJB	

Description: II-7

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-05

Sampled: 01/13/10 13:30

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	4.0		mg/L	1	0.32	1.0	NE	SM18 53108	01/26/10 14:30	RSA	

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	393	D	mg/L	10	7.80	25.0	NE	RSK 175	01/25/10 12:27	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:48	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:48	LAC	
Methane [74-82-8]	0.055		mg/L	1	0.0002	0.001	NE	RSK 175	01/25/10 11:48	LAC	

Description: II-7
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-05
Sampled: 01/13/10 13:30
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.071	U	mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	01/21/10 20:01	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	01/21/10 20:01	MEF	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	01/21/10 20:01	MEF	
HiBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	01/21/10 20:01	MEF	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	01/21/10 20:01	MEF	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	01/21/10 20:01	MEF	
Lactic Acid [50-21-5]	0.088	U	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	01/21/10 20:01	MEF	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	01/21/10 20:01	MEF	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	01/21/10 20:01	MEF	
Pyruvic Acid [127-17-3]	0.045	J	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	01/21/10 20:01	MEF	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
Trimethylacetic acid	76	1	70.0	108 %	80-124	0A20001	Volatile Fatty Acids	01/21/10 20:01	MEF		

Description: II-7B

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-06

Sampled: 01/13/10 12:10

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 14:10	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 14:10	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	01/23/10 14:10	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	01/23/10 14:10	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 14:10	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	01/23/10 14:10	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	01/23/10 14:10	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 14:10	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	01/23/10 14:10	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	01/23/10 14:10	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	01/23/10 14:10	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	01/23/10 14:10	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	48	1	50.0	96 %	51-122	0A23001	EPA 8260B	01/23/10 14:10	JKG	
Dibromofluoromethane	49	1	50.0	99 %	68-117	0A23001	EPA 8260B	01/23/10 14:10	JKG	
Toluene-d8	49	1	50.0	97 %	69-110	0A23001	EPA 8260B	01/23/10 14:10	JKG	

Description: II-7B

Lab Sample ID: C915317-06

Received: 01/15/10 13:00

Matrix: Ground Water

Sampled: 01/13/10 12:10

Work Order: C915317

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	3.8	J	mg/L	1	1.2	5.0	NE	SM4500-Cl/E	01/19/10 15:09	AJB	
Nitrate as N [14797-55-8] ^	0.25	J	mg/L	1	0.0056	0.10	10	EPA 353.2	01/27/10 09:05	PEV	
Sulfate as SO4 [14808-79-8] ^	100	JD	mg/L	4	0.72	20	250	EPA 300.0	01/20/10 04:59	AJB	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	01/18/10 11:51	AJB	
Total Alkalinity [471-34-1] ^	95		mg/L	1	8.0	15	NE	EPA 310.2	01/19/10 17:43	AJB	

Description: II-7B
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-06
Sampled: 01/13/10 12:10
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	2.5		mg/L	1	0.32	1.0	NE	SM18 5310B	01/26/10 14:30	RSA	

Description: II-7B

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-06

Sampled: 01/13/10 12:10

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	0.780	U	mg/L	1	0.780	2.50	NE	RSK 175	01/25/10 11:51	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:51	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:51	LAC	
Methane [74-82-8]	0.006		mg/L	1	0.0002	0.001	NE	RSK 175	01/25/10 11:51	LAC	

Description: II-7B
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-06
Sampled: 01/13/10 12:10
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.071	U	mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	01/21/10 21:04	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	01/21/10 21:04	MEF	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	01/21/10 21:04	MEF	
HLBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	01/21/10 21:04	MEF	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	01/21/10 21:04	MEF	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	01/21/10 21:04	MEF	
Lactic Acid [50-21-5]	0.088	U	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	01/21/10 21:04	MEF	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	01/21/10 21:04	MEF	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	01/21/10 21:04	MEF	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	01/21/10 21:04	MEF	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	76	1	70.0	109 %	80-124	0A20001	Volatile Fatty Acids	01/21/10 21:04	MEF	

Description: II-9

Lab Sample ID: C915317-07

Received: 01/15/10 13:00

Matrix: Ground Water

Sampled: 01/14/10 10:40

Work Order: C915317

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 17:06	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 17:06	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	01/23/10 17:06	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	4.2	J	ug/L	1	0.36	1.0	5	EPA 8260B	01/23/10 17:06	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 17:06	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	01/23/10 17:06	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	01/23/10 17:06	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 17:06	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	01/23/10 17:06	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	01/23/10 17:06	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	01/23/10 17:06	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	01/23/10 17:06	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	46	1	50.0	92 %	51-122	0A23001	EPA 8260B	01/23/10 17:06	JKG	
Dibromofluoromethane	46	1	50.0	92 %	68-117	0A23001	EPA 8260B	01/23/10 17:06	JKG	
Toluene-d8	47	1	50.0	95 %	69-110	0A23001	EPA 8260B	01/23/10 17:06	JKG	

Description: II-9

Lab Sample ID: C915317-07

Received: 01/15/10 13:00

Matrix: Ground Water

Sampled: 01/14/10 10:40

Work Order: C915317

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	6.5		mg/L	1	1.2	5.0	NE	SM4500-Cl/E	01/19/10 15:10	AJB	
Nitrate as N [14797-55-8] ^	0.25	J	mg/L	1	0.0056	0.10	10	EPA 353.2	01/27/10 09:05	PEV	
Sulfate as SO4 [14808-79-8] ^	51	J	mg/L	1	0.18	5.0	250	EPA 300.0	01/19/10 18:26	AJB	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1	SM18 4500-S D	01/18/10 15:07	AJB	
Total Alkalinity [471-34-1] ^	92		mg/L	1	8.0	15	NE	EPA 310.2	01/19/10 17:44	AJB	

Description: II-9
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-07
Sampled: 01/14/10 10:40
Sampled By: Gary Simcox

Received: 01/15/10 13:00
Work Order: C915317

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	4.1		mg/L	1	0.32	1.0	NE	SM18 5310B	01/26/10 14:30	RSA	



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Description: II-9

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-07

Sampled: 01/14/10 10:40

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Dissolved Gases by GC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Carbon dioxide [124-38-9]	201		mg/L	1	0.780	2.50	NE	RSK 175	01/25/10 11:55	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:55	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	01/25/10 11:55	LAC	
Methane [74-82-8]	0.0009	J	mg/L	1	0.0002	0.001	NE	RSK 175	01/25/10 11:55	LAC	

Description: II-9

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C915317-07

Sampled: 01/14/10 10:40

Sampled By: Gary Simcox

Received: 01/15/10 13:00

Work Order: C915317

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.071	U	mg/L	1	0.071	0.50	NE	Volatile Fatty Acids	01/21/10 22:06	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	01/21/10 22:06	MEF	
Hexanoic Acid [142-62-1]	0.32	U	mg/L	1	0.32	0.50		Volatile Fatty Acids	01/21/10 22:06	MEF	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.098	U	mg/L	1	0.098	0.50		Volatile Fatty Acids	01/21/10 22:06	MEF	
iso-Hexanoic Acid [646-07-1]	0.41	U	mg/L	1	0.41	0.50		Volatile Fatty Acids	01/21/10 22:06	MEF	
iso-Pentanoic Acid [503-74-2]	0.13	U	mg/L	1	0.13	0.50		Volatile Fatty Acids	01/21/10 22:06	MEF	
Lactic Acid [50-21-5]	0.088	U	mg/L	1	0.088	0.50	NE	Volatile Fatty Acids	01/21/10 22:06	MEF	
Pentanoic Acid [109-52-4]	0.18	U	mg/L	1	0.18	0.50		Volatile Fatty Acids	01/21/10 22:06	MEF	
Propionic Acid [79-09-4]	0.054	U	mg/L	1	0.054	0.50	NE	Volatile Fatty Acids	01/21/10 22:06	MEF	
Pyruvic Acid [127-17-3]	0.020	U	mg/L	1	0.020	0.50	NE	Volatile Fatty Acids	01/21/10 22:06	MEF	
<hr/>											
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
Trimethylacetic acid	75	1	70.0	107 %	80-124	0A20001	Volatile Fatty Acids	01/21/10 22:06	MEF		

Description: Trip Blank
Matrix: Water
Project: White Street Landfill MNA

Lab Sample ID: C915317-08
Sampled: 01/12/10 09:50
Sampled By: ENCO

Received: 01/15/10 13:00
Work Order: C915317

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 13:11	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 13:11	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	01/23/10 13:11	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	01/23/10 13:11	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	01/23/10 13:11	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	01/23/10 13:11	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	01/23/10 13:11	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	01/23/10 13:11	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	01/23/10 13:11	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	01/23/10 13:11	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	01/23/10 13:11	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	01/23/10 13:11	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	48	1	50.0	96 %	51-122	0A23001	EPA 8260B	01/23/10 13:11	JKG	
Dibromofluoromethane	45	1	50.0	89 %	68-117	0A23001	EPA 8260B	01/23/10 13:11	JKG	
Toluene-d8	46	1	50.0	93 %	69-110	0A23001	EPA 8260B	01/23/10 13:11	JKG	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 0A22005 - EPA 5030B_MS

Blank (0A22005-BLK1)

Prepared: 01/22/2010 08:51 Analyzed: 01/22/2010 23:20

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.27	U	1.0	ug/L							
Benzene	0.20	U	1.0	ug/L							
Chloroethane	0.30	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.36	U	1.0	ug/L							
Ethylbenzene	0.20	U	1.0	ug/L							
m,p-Xylenes	0.48	U	2.0	ug/L							
o-Xylene	0.27	U	1.0	ug/L							
Toluene	0.27	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.34	U	1.0	ug/L							
Trichloroethene	0.38	U	1.0	ug/L							
Vinyl chloride	0.30	U	1.0	ug/L							
Xylenes (Total)	0.40	U	1.0	ug/L							
Surrogate: 4-Bromofluorobenzene	46			ug/L	50.0		93	51-122			
Surrogate: Dibromofluoromethane	48			ug/L	50.0		97	68-117			
Surrogate: Toluene-d8	47			ug/L	50.0		94	69-110			

LCS (0A22005-BS1)

Prepared: 01/22/2010 08:51 Analyzed: 01/22/2010 23:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0		101	75-133			
Benzene	20		1.0	ug/L	20.0		99	81-134			
Chlorobenzene	19		1.0	ug/L	20.0		95	83-117			
Toluene	20		1.0	ug/L	20.0		99	71-118			
Trichloroethene	18		1.0	ug/L	20.0		92	75-115			

Matrix Spike (0A22005-MS1)

Prepared: 01/22/2010 08:51 Analyzed: 01/23/2010 00:18

Source: C914715-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.15 U	102	75-133			
Benzene	20		1.0	ug/L	20.0	0.050 U	98	81-134			
Chlorobenzene	19		1.0	ug/L	20.0	0.069 U	96	83-117			
Toluene	21		1.0	ug/L	20.0	0.053 U	103	71-118			
Trichloroethene	19		1.0	ug/L	20.0	0.13 U	95	75-115			

Matrix Spike Dup (0A22005-MSD1)

Prepared: 01/22/2010 08:51 Analyzed: 01/23/2010 00:47

Source: C914715-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.15 U	116	75-133	13	20	
Benzene	22		1.0	ug/L	20.0	0.050 U	112	81-134	13	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.069 U	107	83-117	10	16	
Toluene	22		1.0	ug/L	20.0	0.053 U	112	71-118	8	17	
Trichloroethene	21		1.0	ug/L	20.0	0.13 U	104	75-115	9	18	

Batch 0A23001 - EPA 5030B_MS

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 0A23001 - EPA 5030B_MS

Blank (0A23001-BLK1)

Prepared: 01/23/2010 07:39 Analyzed: 01/23/2010 10:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.27	U	1.0	ug/L							
Benzene	0.20	U	1.0	ug/L							
Chloroethane	0.30	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.36	U	1.0	ug/L							
Ethylbenzene	0.20	U	1.0	ug/L							
m,p-Xylenes	0.48	U	2.0	ug/L							
o-Xylene	0.27	U	1.0	ug/L							
Toluene	0.27	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.34	U	1.0	ug/L							
Trichloroethene	0.38	U	1.0	ug/L							
Vinyl chloride	0.30	U	1.0	ug/L							
Xylenes (Total)	0.40	U	1.0	ug/L							
Surrogate: 4-Bromofluorobenzene	47			ug/L	50.0		94	51-122			
Surrogate: Dibromofluoromethane	46			ug/L	50.0		91	68-117			
Surrogate: Toluene-d8	48			ug/L	50.0		96	69-110			

LCS (0A23001-BS1)

Prepared: 01/23/2010 07:39 Analyzed: 01/23/2010 10:42

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	25		1.0	ug/L	20.0		124	75-133			
Benzene	22		1.0	ug/L	20.0		109	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		99	83-117			
Toluene	22		1.0	ug/L	20.0		112	71-118			
Trichloroethene	21		1.0	ug/L	20.0		103	75-115			

Matrix Spike (0A23001-MS1)

Prepared: 01/23/2010 07:39 Analyzed: 01/23/2010 11:12

Source: C000854-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	24		1.0	ug/L	20.0	0.15 U	121	75-133			
Benzene	23		1.0	ug/L	20.0	0.050 U	113	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.069 U	105	83-117			
Toluene	22		1.0	ug/L	20.0	0.053 U	111	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.13 U	106	75-115			

Matrix Spike Dup (0A23001-MSD1)

Prepared: 01/23/2010 07:39 Analyzed: 01/23/2010 11:41

Source: C000854-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.15 U	112	75-133	8	20	
Benzene	21		1.0	ug/L	20.0	0.050 U	104	81-134	8	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.069 U	103	83-117	3	16	
Toluene	22		1.0	ug/L	20.0	0.053 U	108	71-118	2	17	
Trichloroethene	20		1.0	ug/L	20.0	0.13 U	102	75-115	4	18	

Classical Chemistry Parameters - Quality Control

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0A18007 - NO PREP

Blank (0A18007-BLK1)

Prepared: 01/18/2010 11:37 Analyzed: 01/18/2010 11:51

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.031	U	0.10	mg/L							

LCS (0A18007-BS1)

Prepared: 01/18/2010 11:37 Analyzed: 01/18/2010 11:51

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.35		0.10	mg/L	0.401		88	80-120			

Matrix Spike (0A18007-MS1)

Prepared: 01/18/2010 11:37 Analyzed: 01/18/2010 11:51

Source: C000045-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	-0.012	U	0.10	mg/L	0.401	0.031 U		80-120			QM-07

Matrix Spike Dup (0A18007-MSD1)

Prepared: 01/18/2010 11:37 Analyzed: 01/18/2010 11:51

Source: C000045-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	-0.012	U	0.10	mg/L	0.401	0.031 U		80-120	25		QM-07

Batch 0A18018 - NO PREP

Blank (0A18018-BLK1)

Prepared: 01/18/2010 14:56 Analyzed: 01/18/2010 15:07

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.031	U	0.10	mg/L							

LCS (0A18018-BS1)

Prepared: 01/18/2010 14:56 Analyzed: 01/18/2010 15:07

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.35		0.10	mg/L	0.401		87	80-120			

Matrix Spike (0A18018-MS1)

Prepared: 01/18/2010 14:56 Analyzed: 01/18/2010 15:07

Source: C000079-10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.21		0.10	mg/L	0.401	0.019	49	80-120			QM-07

Matrix Spike Dup (0A18018-MSD1)

Prepared: 01/18/2010 14:56 Analyzed: 01/18/2010 15:07

Source: C000079-10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.22		0.10	mg/L	0.401	0.019	49	80-120	1	25	QM-07

Batch 0A19003 - NO PREP

Blank (0A19003-BLK1)

Prepared: 01/19/2010 09:07 Analyzed: 01/19/2010 11:13

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0A19003 - NO PREP

Blank (0A19003-BLK1) Continued

Prepared: 01/19/2010 09:07 Analyzed: 01/19/2010 11:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO ₄	0.18	U	5.0	mg/L							

LCS (0A19003-BS1)

Prepared: 01/19/2010 09:07 Analyzed: 01/19/2010 11:46

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO ₄	47		5.0	mg/L	50.0		93	90-110			

Matrix Spike (0A19003-MS1)

Prepared: 01/19/2010 09:07 Analyzed: 01/19/2010 12:03

Source: C000045-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO ₄	96		5.0	mg/L	50.0	42	108	80-120			

Matrix Spike Dup (0A19003-MSD1)

Prepared: 01/19/2010 09:07 Analyzed: 01/19/2010 12:19

Source: C000045-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO ₄	98		5.0	mg/L	50.0	42	112	80-120	2	15	

Batch 0A19005 - NO PREP

Blank (0A19005-BLK1)

Prepared: 01/19/2010 09:25 Analyzed: 01/19/2010 19:16

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO ₄	0.18	U	5.0	mg/L							

LCS (0A19005-BS1)

Prepared: 01/19/2010 09:25 Analyzed: 01/19/2010 19:33

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO ₄	49		5.0	mg/L	50.0		97	90-110			

Matrix Spike (0A19005-MS1)

Prepared: 01/19/2010 09:25 Analyzed: 01/19/2010 19:49

Source: C000024-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO ₄	98		5.0	mg/L	50.0	45	106	80-120			

Matrix Spike Dup (0A19005-MSD1)

Prepared: 01/19/2010 09:25 Analyzed: 01/19/2010 20:06

Source: C000024-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO ₄	98		5.0	mg/L	50.0	45	107	80-120	0.5	15	

Batch 0A19027 - NO PREP

Blank (0A19027-BLK1)

Prepared: 01/19/2010 13:30 Analyzed: 01/19/2010 17:34

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0A19027 - NO PREP

Blank (0A19027-BLK1) Continued

Prepared: 01/19/2010 13:30 Analyzed: 01/19/2010 17:34

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	8.0	U	15	mg/L							

LCS (0A19027-BS1)

Prepared: 01/19/2010 13:30 Analyzed: 01/19/2010 17:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	100		15	mg/L	100		102	80-120			

Matrix Spike (0A19027-MS1)

Prepared: 01/19/2010 13:30 Analyzed: 01/19/2010 17:37

Source: C915317-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	43		15	mg/L	100	23	20	80-120			QM-07

Matrix Spike Dup (0A19027-MSD1)

Prepared: 01/19/2010 13:30 Analyzed: 01/19/2010 17:38

Source: C915317-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	45		15	mg/L	100	23	21	80-120	3	25	QM-07

Batch 0A19028 - NO PREP

Blank (0A19028-BLK1)

Prepared: 01/19/2010 13:33 Analyzed: 01/19/2010 15:01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	1.2	U	5.0	mg/L							

LCS (0A19028-BS1)

Prepared: 01/19/2010 13:33 Analyzed: 01/19/2010 15:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	100		5.0	mg/L	100		104	80-120			

Matrix Spike (0A19028-MS1)

Prepared: 01/19/2010 13:33 Analyzed: 01/19/2010 15:04

Source: C915317-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	100		5.0	mg/L	100	2.1	98	80-120			

Matrix Spike Dup (0A19028-MSD1)

Prepared: 01/19/2010 13:33 Analyzed: 01/19/2010 15:05

Source: C915317-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	97		5.0	mg/L	100	2.1	95	80-120	4	25	

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 0A25009 - NO PREP ANALYTIX

Blank (0A25009-BLK1)

Prepared: 01/25/2010 10:32 Analyzed: 01/25/2010 11:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	0.780	U	2.50	mg/L							
Ethane	0.0004	U	0.002	mg/L							
Ethene	0.0004	U	0.002	mg/L							
Methane	0.0002	U	0.001	mg/L							

LCS (0A25009-BS1)

Prepared: 01/25/2010 10:32 Analyzed: 01/25/2010 11:12

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	26.9		2.50	mg/L	26.3		102	71-119			
Ethane	0.168		0.002	mg/L	0.179		94	75-123			
Ethene	0.153		0.002	mg/L	0.167		92	72-131			
Methane	0.0942		0.001	mg/L	0.0958		98	74-116			

Matrix Spike (0A25009-MS1)

Prepared: 01/25/2010 10:32 Analyzed: 01/25/2010 11:17

Source: C915317-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	92.5		2.50	mg/L	26.3	71.4	80	71-119			
Ethane	0.162		0.002	mg/L	0.179	0.0004 U	91	75-123			
Ethene	0.144		0.002	mg/L	0.167	0.0004 U	86	72-131			
Methane	0.103		0.001	mg/L	0.0958	0.00147	106	74-116			

Matrix Spike Dup (0A25009-MSD1)

Prepared: 01/25/2010 10:32 Analyzed: 01/25/2010 11:20

Source: C915317-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	95.9		2.50	mg/L	26.3	71.4	93	71-119	4	10	
Ethane	0.161		0.002	mg/L	0.179	0.0004 U	90	75-123	0.5	14	
Ethene	0.144		0.002	mg/L	0.167	0.0004 U	86	72-131	0.4	12	
Methane	0.0925		0.001	mg/L	0.0958	0.00147	95	74-116	11	18	

Volatile Fatty Acids by HPLC - Quality Control

Batch 0A20001 - NO PREP ANALYTIX

Blank (0A20001-BLK1)

Prepared: 01/20/2010 08:47 Analyzed: 01/21/2010 11:41

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	0.071	U	0.50	mg/L							
Butyric Acid	0.16	U	0.50	mg/L							
Hexanoic Acid	0.32	U	0.50	mg/L							
HLBA (2-Hydroxyisobutyric Acid)	0.098	U	0.50	mg/L							
iso-Hexanoic Acid	0.41	U	0.50	mg/L							
iso-Pentanoic Acid	0.13	U	0.50	mg/L							
Lactic Acid	0.088	U	0.50	mg/L							
Pentanoic Acid	0.18	U	0.50	mg/L							
Propionic Acid	0.054	U	0.50	mg/L							
Pyruvic Acid	0.020	U	0.50	mg/L							

QUALITY CONTROL

Volatile Fatty Acids by HPLC - Quality Control

Batch 0A20001 - NO PREP ANALYTIX

Blank (0A20001-BLK1) Continued

Prepared: 01/20/2010 08:47 Analyzed: 01/21/2010 11:41

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Trimethylacetic acid	76			mg/L	70.0		109	80-124			

LCS (0A20001-BS1)

Prepared: 01/20/2010 08:47 Analyzed: 01/21/2010 12:43

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	18		0.50	mg/L	20.0		91	73-125			
Butyric Acid	24		0.50	mg/L	20.0		118	80-120			
Hexanoic Acid	20		0.50	mg/L	20.0		99	78-120			
HIBA (2-Hydroxyisobutyric Acid)	16		0.50	mg/L	20.0		82	80-120			
Iso-Hexanoic Acid	18		0.50	mg/L	20.0		90	80-120			
Iso-Pentanoic Acid	19		0.50	mg/L	20.0		95	78-120			
Lactic Acid	14		0.50	mg/L	20.0		69	56-154			
Pentanoic Acid	19		0.50	mg/L	20.0		95	77-120			
Propionic Acid	20		0.50	mg/L	20.0		102	80-120			
Pyruvic Acid	15		0.50	mg/L	20.0		77	37-142			
Surrogate: Trimethylacetic acid	69			mg/L	70.0		98	80-124			

Matrix Spike (0A20001-MS1)

Prepared: 01/20/2010 08:47 Analyzed: 01/21/2010 13:46

Source: C915317-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	18		0.50	mg/L	20.0	0.071 U	91	73-125			
Butyric Acid	24		0.50	mg/L	20.0	0.16 U	118	80-120			
Hexanoic Acid	20		0.50	mg/L	20.0	0.32 U	102	78-120			
HIBA (2-Hydroxyisobutyric Acid)	19		0.50	mg/L	20.0	0.098 U	94	80-120			
Iso-Hexanoic Acid	18		0.50	mg/L	20.0	0.41 U	91	80-120			
Iso-Pentanoic Acid	19		0.50	mg/L	20.0	0.13 U	93	78-120			
Lactic Acid	12		0.50	mg/L	20.0	0.088 U	61	56-154			
Pentanoic Acid	19		0.50	mg/L	20.0	0.18 U	93	77-120			
Propionic Acid	20		0.50	mg/L	20.0	0.054 U	102	80-120			
Pyruvic Acid	15		0.50	mg/L	20.0	0.020 U	76	37-142			
Surrogate: Trimethylacetic acid	67			mg/L	70.0		96	80-124			

Matrix Spike Dup (0A20001-MSD1)

Prepared: 01/20/2010 08:47 Analyzed: 01/21/2010 14:48

Source: C915317-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	18		0.50	mg/L	20.0	0.071 U	92	73-125	0.8	10	
Butyric Acid	24		0.50	mg/L	20.0	0.16 U	120	80-120	1	10	
Hexanoic Acid	20		0.50	mg/L	20.0	0.32 U	98	78-120	4	34	
HIBA (2-Hydroxyisobutyric Acid)	18		0.50	mg/L	20.0	0.098 U	91	80-120	3	15	
Iso-Hexanoic Acid	18		0.50	mg/L	20.0	0.41 U	91	80-120	0.6	15	
Iso-Pentanoic Acid	19		0.50	mg/L	20.0	0.13 U	93	78-120	0.5	15	
Lactic Acid	13		0.50	mg/L	20.0	0.088 U	64	56-154	5	19	
Pentanoic Acid	19		0.50	mg/L	20.0	0.18 U	95	77-120	2	10	
Propionic Acid	21		0.50	mg/L	20.0	0.054 U	103	80-120	1	10	
Pyruvic Acid	15		0.50	mg/L	20.0	0.020 U	77	37-142	1	10	

QUALITY CONTROL

Volatile Fatty Acids by HPLC - Quality Control

Batch 0A20001 - NO PREP ANALYTIX

Matrix Spike Dup (0A20001-MSD1) Continued

Prepared: 01/20/2010 08:47 Analyzed: 01/21/2010 14:48

Source: C915317-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Trimethylacetic acid	69			mg/L	70.0		98	80-124			

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0A26026 - NO PREP

Blank (0A26026-BLK1)

Prepared: 01/26/2010 13:39 Analyzed: 01/26/2010 14:30

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	0.32	U	1.0	mg/L							

LCS (0A26026-BS1)

Prepared: 01/26/2010 13:39 Analyzed: 01/26/2010 14:30

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	44		1.0	mg/L	41.6		106	85-115			

Matrix Spike (0A26026-MS1)

Prepared: 01/26/2010 13:39 Analyzed: 01/26/2010 14:30

Source: A000430-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	45		1.0	mg/L	40.0	0.32 U	113	85-115			

Matrix Spike Dup (0A26026-MSD1)

Prepared: 01/26/2010 13:39 Analyzed: 01/26/2010 14:30

Source: A000430-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	43		1.0	mg/L	40.0	0.32 U	107	85-115	5	21	

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

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1999, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 26

[illegible]

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Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 1 of 8
Lab Proj #: P1001156
Report Date: 01/22/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

Laboratory Results

Total pages in data package: 9

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1001156-01	MW-14
P1001156-02	II-1
P1001156-03	II-2
P1001156-04	II-2B
P1001156-05	II-7
P1001156-06	II-7B
P1001156-07	II-9

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: _____

Debbie Hallo

Date: _____

1-22-10

Project Manager: _____

Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

As a valued client we would appreciate your comments on our service.

Please call customer service at (412)826-5245 or email customerservice@microseeps.com.

Case Narrative:

Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 2 of 8
Lab Proj #: P1001156
Report Date: 01/22/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-14	Vapor	P1001156-01	13 Jan. 10 16:19	15 Jan. 10 11:27		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Hydrogen	<0.600	0.600	nM	AM20GAX	1/18/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
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Page: Page 3 of 8
Lab Proj #: P1001156
Report Date: 01/22/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-1	Vapor	P1001156-02	13 Jan. 10 10:20	15 Jan. 10 11:27		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Hydrogen	2.100	0.600	nM	AM20GAX	1/18/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
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Page: Page 4 of 8
Lab Proj #: P1001156
Report Date: 01/22/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-2	Vapor	P1001156-03	12 Jan. 10 10:30	15 Jan. 10 11:27		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Hydrogen	2.000	0.600	nM	AM20GAX	1/18/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
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Page: Page 5 of 8
Lab Proj #: P1001156
Report Date: 01/22/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-2B	Vapor	P1001156-04	14 Jan. 10 9:40	15 Jan. 10 11:27		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	1.100	0.600	nM	AM20GAX	1/18/10	sl



Client Name: S & ME
Contact: Connel Ware
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Page: Page 6 of 8
Lab Proj #: P1001156
Report Date: 01/22/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-7	Vapor	P1001156-05	13 Jan. 10 14:00	15 Jan. 10 11:27		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	3.700	0.600	nM	AM20GAX	1/18/10	sl



Client Name: S & ME
Contact: Connel Ware
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Page: Page 7 of 8
Lab Proj #: P1001156
Report Date: 01/22/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-7B	Vapor	P1001156-06	13 Jan. 10 12:30	15 Jan. 10 11:27		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	3.600	0.600	nM	AM20GAX	1/18/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 8 of 8
Lab Proj #: P1001156
Report Date: 01/22/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-9	Vapor	P1001156-07	14 Jan. 10 11:15	15 Jan. 10 11:27		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Hydrogen	<0.600	0.600	nM	AM20GAX	1/18/10	sl





Microseeps
Lab. Proj. #

P1001156

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-5245

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238

Fax No.: (412) 826-3433

Company :

S&ME, Inc.

Co. Address :

3718 Old Battleground Road, Greensboro, NC 27410

Phone # :

(336) 288-7180

Fax # : (336) 288-8980

Proj. Manager :

Connel D. Ware

Proj. Name/Number :

White Street Landfill - 1584-98-081

Sampler's signature :

[Signature]

Cooler Temp.

Parameters Requested

Results to : S&ME Inc

Attn: Connel Ware

Invoice to : Same

Sample ID	Sample Description	Sample Type		Date	Time	Diss																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090 FAX: 919.467.3515



www.encolabs.com

Thursday, June 24, 2010

S&ME, Inc. (SM004)

Attn: Connel Ware

3718 Old Battleground Rd.

Greensboro, NC 27410

RE: Laboratory Results for

Project Number: [none], Project Name/Desc: White Street Landfill MNA

ENCO Workorder: C004742

Dear Connel Ware,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Friday, April 30, 2010.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith". The signature is written in a cursive, flowing style.

Chuck Smith

Project Manager

Enclosure(s)

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 4103-MW14		Lab ID: C004742-01		Sampled: 04/29/10 14:50		Received: 04/30/10 13:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	05/27/10	05/04/10	07:43	5/4/2010 15:12			
EPA 310.2	05/13/10	05/04/10	09:39	5/4/2010 10:35			
EPA 353.2	05/27/10	05/04/10	12:49	5/4/2010 13:38			
EPA 8260B	05/13/10	05/06/10	15:38	5/7/2010 10:18			
RSK 175	05/13/10	05/05/10	10:11	5/7/2010 09:37			
SM18 4500-S D	05/06/10	05/03/10	12:04	5/3/2010 12:04			
SM18 5310B	05/27/10	05/12/10	10:55	5/12/2010 17:58			
Volatile Fatty Acids	05/13/10	05/05/10	08:58	5/5/2010 15:55			

Client ID: 4103-III1		Lab ID: C004742-02		Sampled: 04/29/10 10:15		Received: 04/30/10 13:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	05/27/10	05/04/10	07:43	5/4/2010 15:33			
EPA 353.2	05/27/10	05/04/10	12:49	5/4/2010 13:38			
EPA 8260B	05/13/10	05/06/10	15:38	5/7/2010 10:47			
RSK 175	05/13/10	05/05/10	10:11	5/5/2010 12:09			
SM18 4500-S D	05/06/10	05/03/10	12:04	5/3/2010 12:04			
SM18 5310B	05/27/10	05/12/10	10:55	5/12/2010 17:58			
Volatile Fatty Acids	05/13/10	05/05/10	08:58	5/5/2010 16:57			

Client ID: 4103-III		Lab ID: C004742-02RE1		Sampled: 04/29/10 10:15		Received: 04/30/10 13:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	05/27/10	05/04/10	07:43	5/4/2010 15:53			
EPA 310.2	05/13/10	05/04/10	09:39	5/4/2010 11:17			
RSK 175	05/13/10	05/05/10	10:11	5/7/2010 09:44			

Client ID: 4103-III2		Lab ID: C004742-03		Sampled: 04/29/10 09:00		Received: 04/30/10 13:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	05/27/10	05/04/10	07:43	5/4/2010 16:14			
EPA 310.2	05/13/10	05/04/10	09:39	5/4/2010 10:37			
EPA 353.2	05/27/10	05/04/10	12:49	5/4/2010 13:38			
EPA 8260B	05/13/10	05/06/10	15:38	5/7/2010 11:16			
RSK 175	05/13/10	05/05/10	10:11	5/5/2010 12:13			
SM18 4500-S D	05/06/10	05/03/10	12:04	5/3/2010 12:04			
SM18 5310B	05/27/10	05/12/10	10:55	5/12/2010 17:58			
Volatile Fatty Acids	05/13/10	05/05/10	08:58	5/5/2010 18:00			



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Client ID: 4103-II2B	Lab ID: C004742-04	Sampled: 04/29/10 16:30	Received: 04/30/10 13:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	05/27/10	05/04/10 07:43	5/4/2010 16:35
EPA 310.2	05/13/10	05/04/10 09:39	5/4/2010 10:38
EPA 353.2	05/27/10	05/04/10 12:49	5/4/2010 13:38
EPA 8260B	05/13/10	05/06/10 15:38	5/7/2010 11:45
RSK 175	05/13/10	05/05/10 10:11	5/5/2010 12:16
SM18 4500-S D	05/06/10	05/03/10 12:04	5/3/2010 12:04
SM18 5310B	05/27/10	05/12/10 10:55	5/12/2010 17:58
Volatile Fatty Acids	05/13/10	05/05/10 08:58	5/5/2010 19:02

Client ID: 4103-II2B	Lab ID: C004742-04RE1	Sampled: 04/29/10 16:30	Received: 04/30/10 13:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK 175	05/13/10	05/05/10 10:11	5/6/2010 09:06

Client ID: 4103-II7	Lab ID: C004742-05	Sampled: 04/29/10 12:50	Received: 04/30/10 13:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	05/27/10	05/04/10 07:43	5/4/2010 17:37
EPA 310.2	05/13/10	05/04/10 09:39	5/4/2010 10:39
EPA 353.2	05/27/10	05/04/10 12:49	5/4/2010 13:38
EPA 8260B	05/13/10	05/06/10 15:38	5/7/2010 12:14
RSK 175	05/13/10	05/05/10 10:11	5/5/2010 12:20
SM18 4500-S D	05/06/10	05/03/10 12:04	5/3/2010 12:04
SM18 5310B	05/27/10	05/12/10 10:55	5/12/2010 17:58
Volatile Fatty Acids	05/13/10	05/05/10 08:58	5/5/2010 20:05

Client ID: 4103-II7	Lab ID: C004742-05RE1	Sampled: 04/29/10 12:50	Received: 04/30/10 13:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK 175	05/13/10	05/05/10 10:11	5/7/2010 09:57

Client ID: 4103-II7B	Lab ID: C004742-06	Sampled: 04/29/10 11:30	Received: 04/30/10 13:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	05/27/10	05/04/10 07:43	5/4/2010 17:57
EPA 310.2	05/13/10	05/04/10 09:39	5/4/2010 10:42
EPA 353.2	05/27/10	05/04/10 12:49	5/4/2010 13:38
EPA 8260B	05/13/10	05/06/10 15:38	5/7/2010 12:43
RSK 175	05/13/10	05/05/10 10:11	5/5/2010 12:24
SM18 4500-S D	05/06/10	05/03/10 12:04	5/3/2010 12:04
SM18 5310B	05/27/10	05/12/10 10:55	5/12/2010 17:58
Volatile Fatty Acids	05/13/10	05/05/10 08:58	5/5/2010 21:08

Client ID: 4103-II7B	Lab ID: C004742-06RE1	Sampled: 04/29/10 11:30	Received: 04/30/10 13:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	05/27/10	05/04/10 07:43	5/4/2010 18:18

Client ID: 4103-II9		Lab ID: C004742-07		Sampled: 04/29/10 17:45		Received: 04/30/10 13:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	05/27/10	05/04/10	07:43	5/4/2010 18:39			
EPA 353.2	05/27/10	05/04/10	12:49	5/4/2010 13:38			
EPA 8260B	05/13/10	05/06/10	15:38	5/7/2010 13:12			
RSK 175	05/13/10	05/05/10	10:11	5/5/2010 12:28			
SM18 4500-S D	05/06/10	05/03/10	12:04	5/3/2010 12:04			
SM18 5310B	05/27/10	05/12/10	10:55	5/12/2010 17:58			
Volatile Fatty Acids	05/13/10	05/05/10	08:58	5/5/2010 22:10			

Client ID: 4103-II9		Lab ID: C004742-07RE1		Sampled: 04/29/10 17:45		Received: 04/30/10 13:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 310.2	05/13/10	05/04/10	09:39	5/4/2010 11:17			
RSK 175	05/13/10	05/05/10	10:11	5/6/2010 09:14			

Client ID: 4103-Trip Blank		Lab ID: C004742-08		Sampled: 04/29/10 09:00		Received: 04/30/10 13:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 8260B	05/13/10	05/06/10	15:38	5/7/2010 13:42			

NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 4103-MW14				Lab ID: C004742-01					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	111		1	0.780	2.50	NE	mg/L	RSK 175	
Chloride	3.9	J	1	0.018	5.0	NE	mg/L	EPA 300.0	
Total Alkalinity	16		1	8.0	15	NE	mg/L	EPA 310.2	
Total Organic Carbon	0.32	J	1	0.32	1.0	NE	mg/L	SM18 5310B	

Client ID: 4103-III				Lab ID: C004742-02					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	2.1	J	1	0.050	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	4.4		1	0.10	1.0	1	ug/L	EPA 8260B	
Acetone	2.9	J	1	1.5	5.0	100	ug/L	EPA 8260B	
Benzene	0.72	J	1	0.050	1.0	1	ug/L	EPA 8260B	
Chlorobenzene	1.4	J	1	0.069	1.0	3	ug/L	EPA 8260B	
Chloroethane	0.74	J	1	0.18	1.0	10	ug/L	EPA 8260B	
cis-1,2-Dichloroethene	3.1	J	1	0.075	1.0	5	ug/L	EPA 8260B	
Ethane	0.0007	J	1	0.0004	0.002	NE	mg/L	RSK 175	
Methane	0.007		1	0.0002	0.001	NE	mg/L	RSK 175	
Sulfate as SO4	14	J	1	0.12	5.0	250000	mg/L	EPA 300.0	
Total Organic Carbon	23		1	0.32	1.0	NE	mg/L	SM18 5310B	
Trichloroethene	0.55	J	1	0.13	1.0	1	ug/L	EPA 8260B	
Vinyl chloride	0.49	J	1	0.083	1.0	1	ug/L	EPA 8260B	

Client ID: 4103-III				Lab ID: C004742-02RE1					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	544	D	10	7.80	25.0	NE	mg/L	RSK 175	
Chloride	390	D	10	0.18	50	NE	mg/L	EPA 300.0	
Total Alkalinity	350	D	3.98	32	60	NE	mg/L	EPA 310.2	

Client ID: 4103-II2				Lab ID: C004742-03					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	9.2		1	0.050	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	0.46	J	1	0.10	1.0	1	ug/L	EPA 8260B	
Benzene	0.79	J	1	0.050	1.0	1	ug/L	EPA 8260B	
Carbon dioxide	164		1	0.780	2.50	NE	mg/L	RSK 175	
Chloride	12		1	0.018	5.0	NE	mg/L	EPA 300.0	
Chlorobenzene	0.48	J	1	0.069	1.0	3	ug/L	EPA 8260B	
cis-1,2-Dichloroethene	12		1	0.075	1.0	5	ug/L	EPA 8260B	
Methane	1.47		1	0.0002	0.001	NE	mg/L	RSK 175	
Sulfate as SO4	19	J	1	0.12	5.0	250000	mg/L	EPA 300.0	
Tetrachloroethene	3.2		1	0.099	1.0	1	ug/L	EPA 8260B	
Total Alkalinity	330	D	2	16	30	NE	mg/L	EPA 310.2	
Total Organic Carbon	2.0		1	0.32	1.0	NE	mg/L	SM18 5310B	
Trichloroethene	2.6		1	0.13	1.0	1	ug/L	EPA 8260B	
Trichlorofluoromethane	1.7		1	0.15	1.0	1	ug/L	EPA 8260B	
Vinyl chloride	3.3		1	0.083	1.0	1	ug/L	EPA 8260B	

Client ID: 4103-II2B				Lab ID: C004742-04					
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	10		1	0.050	1.0	5	ug/L	EPA 8260B	



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Client ID: 4103-II2B	Lab ID: C004742-04
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Benzene	1.1		1	0.050	1.0	1	ug/L	EPA 8260B	
Carbon disulfide	1.6	J	1	0.54	5.0	100	ug/L	EPA 8260B	
Chloride	11		1	0.018	5.0	NE	mg/L	EPA 300.0	
Chlorobenzene	0.52	J	1	0.069	1.0	3	ug/L	EPA 8260B	
cis-1,2-Dichloroethene	16		1	0.075	1.0	5	ug/L	EPA 8260B	
Methane	1.33		1	0.0002	0.001	NE	mg/L	RSK 175	
Sulfate as SO ₄	21	J	1	0.12	5.0	250000	mg/L	EPA 300.0	
Tetrachloroethene	2.2		1	0.099	1.0	1	ug/L	EPA 8260B	
Total Alkalinity	200	D	2	16	30	NE	mg/L	EPA 310.2	
Total Organic Carbon	2.1		1	0.32	1.0	NE	mg/L	SM18 5310B	
Trichloroethene	2.5		1	0.13	1.0	1	ug/L	EPA 8260B	
Trichlorofluoromethane	1.6		1	0.15	1.0	1	ug/L	EPA 8260B	
Vinyl chloride	3.5		1	0.083	1.0	1	ug/L	EPA 8260B	

Client ID: 4103-II2B	Lab ID: C004742-04RE1
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	354	D	10	7.80	25.0	NE	mg/L	RSK 175	

Client ID: 4103-II7	Lab ID: C004742-05
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	1.3	J	1	0.050	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	0.43	J	1	0.10	1.0	1	ug/L	EPA 8260B	
Benzene	0.68	J	1	0.050	1.0	1	ug/L	EPA 8260B	
Chloride	18		1	0.018	5.0	NE	mg/L	EPA 300.0	
cis-1,2-Dichloroethene	3.5	J	1	0.075	1.0	5	ug/L	EPA 8260B	
Methane	0.029		1	0.0002	0.001	NE	mg/L	RSK 175	
Sulfate as SO ₄	14	J	1	0.12	5.0	250000	mg/L	EPA 300.0	
Tetrachloroethene	0.40	J	1	0.099	1.0	1	ug/L	EPA 8260B	
Toluene	0.59	J	1	0.053	1.0	1	ug/L	EPA 8260B	
Total Alkalinity	70		1	8.0	15	NE	mg/L	EPA 310.2	
Total Organic Carbon	3.5		1	0.32	1.0	NE	mg/L	SM18 5310B	
Vinyl chloride	0.75	J	1	0.083	1.0	1	ug/L	EPA 8260B	

Client ID: 4103-II7	Lab ID: C004742-05RE1
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	430	D	10	7.80	25.0	NE	mg/L	RSK 175	

Client ID: 4103-II7B	Lab ID: C004742-06
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	4.8	J	1	0.018	5.0	NE	mg/L	EPA 300.0	
Methane	0.002		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.23	J	1	0.021	0.10	10000	mg/L	EPA 353.2	
Tetrachloroethene	0.45	J	1	0.099	1.0	1	ug/L	EPA 8260B	
Total Alkalinity	110		1	8.0	15	NE	mg/L	EPA 310.2	
Total Organic Carbon	2.3		1	0.32	1.0	NE	mg/L	SM18 5310B	

Client ID: 4103-II7B	Lab ID: C004742-06RE1
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Sulfate as SO ₄	100	JD	2	0.24	10	250000	mg/L	EPA 300.0	



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Client ID: 4103-II9 Lab ID: C004742-07

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	5.2		1	0.050	1.0	5	ug/L	EPA 8260B	
Chloride	12		1	0.018	5.0	NE	mg/L	EPA 300.0	
cis-1,2-Dichloroethene	11		1	0.075	1.0	5	ug/L	EPA 8260B	
Methane	0.006		1	0.0002	0.001	NE	mg/L	RSK 175	
Nitrate as N	0.12	J	1	0.021	0.10	10000	mg/L	EPA 353.2	
Sulfate as SO4	27	J	1	0.12	5.0	250000	mg/L	EPA 300.0	
Total Organic Carbon	4.5		1	0.32	1.0	NE	mg/L	SM18 5310B	
Vinyl chloride	0.66	J	1	0.083	1.0	1	ug/L	EPA 8260B	

Client ID: 4103-II9 Lab ID: C004742-07RE1

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	295	D	10	7.80	25.0	NE	mg/L	RSK 175	
Total Alkalinity	110	D	2	16	30	NE	mg/L	EPA 310.2	

ANALYTICAL RESULTS

Description: 4103-MW14

Lab Sample ID: C004742-01

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 14:50

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.091	U	ug/L	1	0.091	1.0	5	EPA 8260B	05/07/10 10:18	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.085	U	ug/L	1	0.085	1.0	3	EPA 8260B	05/07/10 10:18	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.068	U	ug/L	1	0.068	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
1,1-Dichloroethane [75-34-3] ^	0.050	U	ug/L	1	0.050	1.0	5	EPA 8260B	05/07/10 10:18	JKG	
1,1-Dichloroethene [75-35-4] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	05/07/10 10:18	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	05/07/10 10:18	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.052	U	ug/L	1	0.052	1.0	5	EPA 8260B	05/07/10 10:18	JKG	
1,2-Dichloroethane [107-06-2] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
1,2-Dichloropropane [78-87-5] ^	0.098	U	ug/L	1	0.098	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	05/07/10 10:18	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	05/07/10 10:18	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	05/07/10 10:18	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	05/07/10 10:18	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	05/07/10 10:18	JKG	
Benzene [71-43-2] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
Bromochloromethane [74-97-5] ^	0.11	U	ug/L	1	0.11	1.0	3	EPA 8260B	05/07/10 10:18	JKG	
Bromodichloromethane [75-27-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
Bromoform [75-25-2] ^	0.20	U	ug/L	1	0.20	1.0	3	EPA 8260B	05/07/10 10:18	JKG	
Bromomethane [74-83-9] ^	0.28	U	ug/L	1	0.28	1.0	10	EPA 8260B	05/07/10 10:18	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	05/07/10 10:18	JKG	
Carbon tetrachloride [56-23-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
Chlorobenzene [108-90-7] ^	0.069	U	ug/L	1	0.069	1.0	3	EPA 8260B	05/07/10 10:18	JKG	
Chloroethane [75-00-3] ^	0.18	U	ug/L	1	0.18	1.0	10	EPA 8260B	05/07/10 10:18	JKG	
Chloroform [67-66-3] ^	0.083	U	ug/L	1	0.083	1.0	5	EPA 8260B	05/07/10 10:18	JKG	
Chloromethane [74-87-3] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.075	U	ug/L	1	0.075	1.0	5	EPA 8260B	05/07/10 10:18	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.073	U	ug/L	1	0.073	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
Dibromochloromethane [124-48-1] ^	0.067	U	ug/L	1	0.067	1.0	3	EPA 8260B	05/07/10 10:18	JKG	
Dibromomethane [74-95-3] ^	0.13	U	ug/L	1	0.13	1.0	10	EPA 8260B	05/07/10 10:18	JKG	
Ethylbenzene [100-41-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	05/07/10 10:18	JKG	
Methylene chloride [75-09-2] ^	0.070	U	ug/L	1	0.070	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
Styrene [100-42-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
Tetrachloroethene [127-18-4] ^	0.099	U	ug/L	1	0.099	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
Toluene [108-88-3] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	05/07/10 10:18	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.080	U	ug/L	1	0.080	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	05/07/10 10:18	JKG	
Trichloroethene [79-01-6] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	05/07/10 10:18	JKG	

Description: 4103-MW14

Lab Sample ID: C004742-01

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 14:50

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Trichlorofluoromethane [75-69-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	05/07/10 10:18	JKG	
Vinyl chloride [75-01-4] ^	0.083	U	ug/L	1	0.083	1.0	1	EPA 8260B	05/07/10 10:18	JKG	
Xylenes (Total) [1330-20-7] ^	0.22	U	ug/L	1	0.22	1.0	5	EPA 8260B	05/07/10 10:18	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	46	1	50.0	92 %	51-122	0E06030	EPA 8260B	05/07/10 10:18	JKG	
Dibromofluoromethane	47	1	50.0	94 %	68-117	0E06030	EPA 8260B	05/07/10 10:18	JKG	
Toluene-d8	47	1	50.0	94 %	69-110	0E06030	EPA 8260B	05/07/10 10:18	JKG	

Description: 4103-MW14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C004742-01
Sampled: 04/29/10 14:50
Sampled By: Gary Simcox

Received: 04/30/10 13:15
Work Order: C004742

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	3.9	J	mg/L	1	0.018	5.0	NE	EPA 300.0	05/04/10 15:12	PEV	
Nitrate as N [14797-55-8] ^	0.021	U	mg/L	1	0.021	0.10	10000	EPA 353.2	05/04/10 13:38	PEV	
Sulfate as SO4 [14808-79-8] ^	0.12	U	mg/L	1	0.12	5.0	250000	EPA 300.0	05/04/10 15:12	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1000	SM18 4500-S D	05/03/10 12:04	JOC	
Total Alkalinity [471-34-1] ^	16		mg/L	1	8.0	15	NE	EPA 310.2	05/04/10 10:35	PEV	

Description: 4103-MW14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C004742-01
Sampled: 04/29/10 14:50
Sampled By: Gary Simcox

Received: 04/30/10 13:15
Work Order: C004742

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Total Organic Carbon [ECL-0165] ^	0.32	J	mg/L	1	0.32	1.0	NE	SM18 5310B	05/12/10 17:58	RSA	



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Description: 4103-MW14

Lab Sample ID: C004742-01

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 14:50

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	111		mg/L	1	0.780	2.50	NE	RSK 175	05/07/10 09:37	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/07/10 09:37	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/07/10 09:37	LAC	
Methane [74-82-8]	0.0002	U	mg/L	1	0.0002	0.001	NE	RSK 175	05/07/10 09:37	LAC	

Description: 4103-MW14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C004742-01
Sampled: 04/29/10 14:50
Sampled By: Gary Simcox

Received: 04/30/10 13:15
Work Order: C004742

Volatile Fatty Acids by HPLC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Acetic Acid [64-19-7]	0.083	U	mg/L	1	0.083	0.50	NE	Volatile Fatty Acids	05/05/10 15:55	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	05/05/10 15:55	MEF	
Hexanoic Acid [142-62-1]	0.23	U	mg/L	1	0.23	1.0		Volatile Fatty Acids	05/05/10 15:55	MEF	
HIIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.16	U	mg/L	1	0.16	0.50		Volatile Fatty Acids	05/05/10 15:55	MEF	
iso-Hexanoic Acid [646-07-1]	0.21	U	mg/L	1	0.21	1.0		Volatile Fatty Acids	05/05/10 15:55	MEF	
iso-Pentanoic Acid [503-74-2]	0.26	U	mg/L	1	0.26	0.50		Volatile Fatty Acids	05/05/10 15:55	MEF	
Lactic Acid [50-21-5]	0.44	U	mg/L	1	0.44	0.50	NE	Volatile Fatty Acids	05/05/10 15:55	MEF	
Pentanoic Acid [109-52-4]	0.27	U	mg/L	1	0.27	0.50		Volatile Fatty Acids	05/05/10 15:55	MEF	
Propionic Acid [79-09-4]	0.18	U	mg/L	1	0.18	0.50	NE	Volatile Fatty Acids	05/05/10 15:55	MEF	
Pyruvic Acid [127-17-3]	0.14	U	mg/L	1	0.14	0.50	NE	Volatile Fatty Acids	05/05/10 15:55	MEF	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Trimethylacetic acid	59	1	50.0	117 %	80-124	0E05002	Volatile Fatty Acids	05/05/10 15:55	MEF	

Description: 4103-III1

Lab Sample ID: C004742-02

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 10:15

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.091	U	ug/L	1	0.091	1.0	5	EPA 8260B	05/07/10 10:47	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.085	U	ug/L	1	0.085	1.0	3	EPA 8260B	05/07/10 10:47	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.068	U	ug/L	1	0.068	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
1,1-Dichloroethane [75-34-3] ^	2.1	J	ug/L	1	0.050	1.0	5	EPA 8260B	05/07/10 10:47	JKG	
1,1-Dichloroethene [75-35-4] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	05/07/10 10:47	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	05/07/10 10:47	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.052	U	ug/L	1	0.052	1.0	5	EPA 8260B	05/07/10 10:47	JKG	
1,2-Dichloroethane [107-06-2] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
1,2-Dichloropropane [78-87-5] ^	0.098	U	ug/L	1	0.098	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
1,4-Dichlorobenzene [106-46-7] ^	4.4		ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	05/07/10 10:47	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	05/07/10 10:47	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	05/07/10 10:47	JKG	
Acetone [67-64-1] ^	2.9	J	ug/L	1	1.5	5.0	100	EPA 8260B	05/07/10 10:47	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	05/07/10 10:47	JKG	
Benzene [71-43-2] ^	0.72	J	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
Bromochloromethane [74-97-5] ^	0.11	U	ug/L	1	0.11	1.0	3	EPA 8260B	05/07/10 10:47	JKG	
Bromodichloromethane [75-27-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
Bromoform [75-25-2] ^	0.20	U	ug/L	1	0.20	1.0	3	EPA 8260B	05/07/10 10:47	JKG	
Bromomethane [74-83-9] ^	0.28	U	ug/L	1	0.28	1.0	10	EPA 8260B	05/07/10 10:47	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	05/07/10 10:47	JKG	
Carbon tetrachloride [56-23-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
Chlorobenzene [108-90-7] ^	1.4	J	ug/L	1	0.069	1.0	3	EPA 8260B	05/07/10 10:47	JKG	
Chloroethane [75-00-3] ^	0.74	J	ug/L	1	0.18	1.0	10	EPA 8260B	05/07/10 10:47	JKG	
Chloroform [67-66-3] ^	0.083	U	ug/L	1	0.083	1.0	5	EPA 8260B	05/07/10 10:47	JKG	
Chloromethane [74-87-3] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	3.1	J	ug/L	1	0.075	1.0	5	EPA 8260B	05/07/10 10:47	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.073	U	ug/L	1	0.073	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
Dibromochloromethane [124-48-1] ^	0.067	U	ug/L	1	0.067	1.0	3	EPA 8260B	05/07/10 10:47	JKG	
Dibromomethane [74-95-3] ^	0.13	U	ug/L	1	0.13	1.0	10	EPA 8260B	05/07/10 10:47	JKG	
Ethylbenzene [100-41-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	05/07/10 10:47	JKG	
Methylene chloride [75-09-2] ^	0.070	U	ug/L	1	0.070	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
Styrene [100-42-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
Tetrachloroethene [127-18-4] ^	0.099	U	ug/L	1	0.099	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
Toluene [108-88-3] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	05/07/10 10:47	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.080	U	ug/L	1	0.080	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	05/07/10 10:47	JKG	
Trichloroethene [79-01-6] ^	0.55	J	ug/L	1	0.13	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
Trichlorofluoromethane [75-69-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 10:47	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	05/07/10 10:47	JKG	
Vinyl chloride [75-01-4] ^	0.49	J	ug/L	1	0.083	1.0	1	EPA 8260B	05/07/10 10:47	JKG	

Description: 4103-II1
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C004742-02
Sampled: 04/29/10 10:15
Sampled By: Gary Simcox

Received: 04/30/10 13:15
Work Order: C004742

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.22	U	ug/L	1	0.22	1.0	5	EPA 8260B	05/07/10 10:47	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	46	1	50.0	92 %	51-122	0E06030	EPA 8260B	05/07/10 10:47	JKG	
Dibromofluoromethane	46	1	50.0	92 %	68-117	0E06030	EPA 8260B	05/07/10 10:47	JKG	
Toluene-d8	46	1	50.0	92 %	69-110	0E06030	EPA 8260B	05/07/10 10:47	JKG	

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	390	D	mg/L	10	0.18	50	NE	EPA 300.0	05/04/10 15:53	PEV	
Nitrate as N [14797-55-8] ^	0.021	U	mg/L	1	0.021	0.10	10000	EPA 353.2	05/04/10 13:38	PEV	
Sulfate as SO4 [14808-79-8] ^	14	J	mg/L	1	0.12	5.0	250000	EPA 300.0	05/04/10 15:33	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1000	SM18 4500-S D	05/03/10 12:04	JOC	
Total Alkalinity [471-34-1] ^	350	D	mg/L	3.98	32	60	NE	EPA 310.2	05/04/10 11:17	PEV	

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	23		mg/L	1	0.32	1.0	NE	SM18 5310B	05/12/10 17:58	RSA	

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	544	D	mg/L	10	7.80	25.0	NE	RSK 175	05/07/10 09:44	LAC	
Ethane [74-84-0]	0.0007	J	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:09	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:09	LAC	
Methane [74-82-8]	0.007		mg/L	1	0.0002	0.001	NE	RSK 175	05/05/10 12:09	LAC	

Description: 4103-II1

Lab Sample ID: C004742-02

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 10:15

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.083	U	mg/L	1	0.083	0.50	NE	Volatile Fatty Acids	05/05/10 16:57	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	05/05/10 16:57	MEF	
Hexanoic Acid [142-62-1]	0.23	U	mg/L	1	0.23	1.0		Volatile Fatty Acids	05/05/10 16:57	MEF	
HiBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.16	U	mg/L	1	0.16	0.50		Volatile Fatty Acids	05/05/10 16:57	MEF	
iso-Hexanoic Acid [646-07-1]	0.21	U	mg/L	1	0.21	1.0		Volatile Fatty Acids	05/05/10 16:57	MEF	
iso-Pentanoic Acid [503-74-2]	0.26	U	mg/L	1	0.26	0.50		Volatile Fatty Acids	05/05/10 16:57	MEF	
Lactic Acid [50-21-5]	0.44	U	mg/L	1	0.44	0.50	NE	Volatile Fatty Acids	05/05/10 16:57	MEF	
Pentanoic Acid [109-52-4]	0.27	U	mg/L	1	0.27	0.50		Volatile Fatty Acids	05/05/10 16:57	MEF	
Propionic Acid [79-09-4]	0.18	U	mg/L	1	0.18	0.50	NE	Volatile Fatty Acids	05/05/10 16:57	MEF	
Pyruvic Acid [127-17-3]	0.14	U	mg/L	1	0.14	0.50	NE	Volatile Fatty Acids	05/05/10 16:57	MEF	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	59	1	50.0	118 %	80-124	0E05002	Volatile Fatty Acids	05/05/10 16:57	MEF	

Description: 4103-II2

Lab Sample ID: C004742-03

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 09:00

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.091	U	ug/L	1	0.091	1.0	5	EPA 8260B	05/07/10 11:16	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.085	U	ug/L	1	0.085	1.0	3	EPA 8260B	05/07/10 11:16	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.068	U	ug/L	1	0.068	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
1,1-Dichloroethane [75-34-3] ^	9.2		ug/L	1	0.050	1.0	5	EPA 8260B	05/07/10 11:16	JKG	
1,1-Dichloroethene [75-35-4] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	05/07/10 11:16	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	05/07/10 11:16	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.052	U	ug/L	1	0.052	1.0	5	EPA 8260B	05/07/10 11:16	JKG	
1,2-Dichloroethane [107-06-2] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
1,2-Dichloropropane [78-87-5] ^	0.098	U	ug/L	1	0.098	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.46	J	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	05/07/10 11:16	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	05/07/10 11:16	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	05/07/10 11:16	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	05/07/10 11:16	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	05/07/10 11:16	JKG	
Benzene [71-43-2] ^	0.79	J	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
Bromochloromethane [74-97-5] ^	0.11	U	ug/L	1	0.11	1.0	3	EPA 8260B	05/07/10 11:16	JKG	
Bromodichloromethane [75-27-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
Bromoform [75-25-2] ^	0.20	U	ug/L	1	0.20	1.0	3	EPA 8260B	05/07/10 11:16	JKG	
Bromomethane [74-83-9] ^	0.28	U	ug/L	1	0.28	1.0	10	EPA 8260B	05/07/10 11:16	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	05/07/10 11:16	JKG	
Carbon tetrachloride [56-23-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
Chlorobenzene [108-90-7] ^	0.48	J	ug/L	1	0.069	1.0	3	EPA 8260B	05/07/10 11:16	JKG	
Chloroethane [75-00-3] ^	0.18	U	ug/L	1	0.18	1.0	10	EPA 8260B	05/07/10 11:16	JKG	
Chloroform [67-66-3] ^	0.083	U	ug/L	1	0.083	1.0	5	EPA 8260B	05/07/10 11:16	JKG	
Chloromethane [74-87-3] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	12		ug/L	1	0.075	1.0	5	EPA 8260B	05/07/10 11:16	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.073	U	ug/L	1	0.073	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
Dibromochloromethane [124-48-1] ^	0.067	U	ug/L	1	0.067	1.0	3	EPA 8260B	05/07/10 11:16	JKG	
Dibromomethane [74-95-3] ^	0.13	U	ug/L	1	0.13	1.0	10	EPA 8260B	05/07/10 11:16	JKG	
Ethylbenzene [100-41-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	05/07/10 11:16	JKG	
Methylene chloride [75-09-2] ^	0.070	U	ug/L	1	0.070	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
Styrene [100-42-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
Tetrachloroethene [127-18-4] ^	3.2		ug/L	1	0.099	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
Toluene [108-88-3] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	05/07/10 11:16	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.080	U	ug/L	1	0.080	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	05/07/10 11:16	JKG	
Trichloroethene [79-01-6] ^	2.6		ug/L	1	0.13	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
Trichlorofluoromethane [75-69-4] ^	1.7		ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 11:16	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	05/07/10 11:16	JKG	
Vinyl chloride [75-01-4] ^	3.3		ug/L	1	0.083	1.0	1	EPA 8260B	05/07/10 11:16	JKG	

Description: 4103-II2
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C004742-03
Sampled: 04/29/10 09:00
Sampled By: Gary Simcox

Received: 04/30/10 13:15
Work Order: C004742

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.22	U	ug/L	1	0.22	1.0	5	EPA 8260B	05/07/10 11:16	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	46	1	50.0	92 %	51-122	0E06030	EPA 8260B	05/07/10 11:16	JKG		
Dibromofluoromethane	46	1	50.0	93 %	68-117	0E06030	EPA 8260B	05/07/10 11:16	JKG		
Toluene-d8	46	1	50.0	92 %	69-110	0E06030	EPA 8260B	05/07/10 11:16	JKG		



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Description: 4103-II2

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C004742-03

Sampled: 04/29/10 09:00

Sampled By: Gary Simcox

Received: 04/30/10 13:15

Work Order: C004742

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	12		mg/L	1	0.018	5.0	NE	EPA 300.0	05/04/10 16:14	PEV	
Nitrate as N [14797-55-8] ^	0.021	U	mg/L	1	0.021	0.10	10000	EPA 353.2	05/04/10 13:38	PEV	
Sulfate as SO4 [14808-79-8] ^	19	J	mg/L	1	0.12	5.0	250000	EPA 300.0	05/04/10 16:14	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1000	SM18 4500-S D	05/03/10 12:04	JOC	
Total Alkalinity [471-34-1] ^	330	D	mg/L	2	16	30	NE	EPA 310.2	05/04/10 10:37	PEV	

Description: 4103-II2

Lab Sample ID: C004742-03

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 09:00

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	2.0		mg/L	1	0.32	1.0	NE	SM18 5310B	05/12/10 17:58	RSA	



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Description: 4103-II2

Lab Sample ID: C004742-03

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 09:00

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	164		mg/L	1	0.780	2.50	NE	RSK 175	05/05/10 12:13	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:13	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:13	LAC	
Methane [74-82-8]	1.47		mg/L	1	0.0002	0.001	NE	RSK 175	05/05/10 12:13	LAC	

Description: 4103-II2

Lab Sample ID: C004742-03

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 09:00

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.083	U	mg/L	1	0.083	0.50	NE	Volatile Fatty Acids	05/05/10 18:00	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	05/05/10 18:00	MEF	
Hexanoic Acid [142-62-1]	0.23	U	mg/L	1	0.23	1.0		Volatile Fatty Acids	05/05/10 18:00	MEF	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.16	U	mg/L	1	0.16	0.50		Volatile Fatty Acids	05/05/10 18:00	MEF	
iso-Hexanoic Acid [646-07-1]	0.21	U	mg/L	1	0.21	1.0		Volatile Fatty Acids	05/05/10 18:00	MEF	
iso-Pentanoic Acid [503-74-2]	0.26	U	mg/L	1	0.26	0.50		Volatile Fatty Acids	05/05/10 18:00	MEF	
Lactic Acid [50-21-5]	0.44	U	mg/L	1	0.44	0.50	NE	Volatile Fatty Acids	05/05/10 18:00	MEF	
Pentanoic Acid [109-52-4]	0.27	U	mg/L	1	0.27	0.50		Volatile Fatty Acids	05/05/10 18:00	MEF	
Propionic Acid [79-09-4]	0.18	U	mg/L	1	0.18	0.50	NE	Volatile Fatty Acids	05/05/10 18:00	MEF	
Pyruvic Acid [127-17-3]	0.14	U	mg/L	1	0.14	0.50	NE	Volatile Fatty Acids	05/05/10 18:00	MEF	
<hr/>											
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
Trimethylacetic acid	60	1	50.0	119 %	80-124	0E05002	Volatile Fatty Acids	05/05/10 18:00	MEF		

Description: 4103-II2B

Lab Sample ID: C004742-04

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 16:30

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.091	U	ug/L	1	0.091	1.0	5	EPA 8260B	05/07/10 11:45	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.085	U	ug/L	1	0.085	1.0	3	EPA 8260B	05/07/10 11:45	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.068	U	ug/L	1	0.068	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
1,1-Dichloroethane [75-34-3] ^	10		ug/L	1	0.050	1.0	5	EPA 8260B	05/07/10 11:45	JKG	
1,1-Dichloroethene [75-35-4] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	05/07/10 11:45	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	05/07/10 11:45	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.052	U	ug/L	1	0.052	1.0	5	EPA 8260B	05/07/10 11:45	JKG	
1,2-Dichloroethane [107-06-2] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
1,2-Dichloropropane [78-87-5] ^	0.098	U	ug/L	1	0.098	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	05/07/10 11:45	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	05/07/10 11:45	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	05/07/10 11:45	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	05/07/10 11:45	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	05/07/10 11:45	JKG	
Benzene [71-43-2] ^	1.1		ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
Bromochloromethane [74-97-5] ^	0.11	U	ug/L	1	0.11	1.0	3	EPA 8260B	05/07/10 11:45	JKG	
Bromodichloromethane [75-27-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
Bromoform [75-25-2] ^	0.20	U	ug/L	1	0.20	1.0	3	EPA 8260B	05/07/10 11:45	JKG	
Bromomethane [74-83-9] ^	0.28	U	ug/L	1	0.28	1.0	10	EPA 8260B	05/07/10 11:45	JKG	
Carbon disulfide [75-15-0] ^	1.6	J	ug/L	1	0.54	5.0	100	EPA 8260B	05/07/10 11:45	JKG	
Carbon tetrachloride [56-23-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
Chlorobenzene [108-90-7] ^	0.52	J	ug/L	1	0.069	1.0	3	EPA 8260B	05/07/10 11:45	JKG	
Chloroethane [75-00-3] ^	0.18	U	ug/L	1	0.18	1.0	10	EPA 8260B	05/07/10 11:45	JKG	
Chloroform [67-66-3] ^	0.083	U	ug/L	1	0.083	1.0	5	EPA 8260B	05/07/10 11:45	JKG	
Chloromethane [74-87-3] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	16		ug/L	1	0.075	1.0	5	EPA 8260B	05/07/10 11:45	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.073	U	ug/L	1	0.073	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
Dibromochloromethane [124-48-1] ^	0.067	U	ug/L	1	0.067	1.0	3	EPA 8260B	05/07/10 11:45	JKG	
Dibromomethane [74-95-3] ^	0.13	U	ug/L	1	0.13	1.0	10	EPA 8260B	05/07/10 11:45	JKG	
Ethylbenzene [100-41-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	05/07/10 11:45	JKG	
Methylene chloride [75-09-2] ^	0.070	U	ug/L	1	0.070	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
Styrene [100-42-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
Tetrachloroethene [127-18-4] ^	2.2		ug/L	1	0.099	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
Toluene [108-88-3] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	05/07/10 11:45	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.080	U	ug/L	1	0.080	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	05/07/10 11:45	JKG	
Trichloroethene [79-01-6] ^	2.5		ug/L	1	0.13	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
Trichlorofluoromethane [75-69-4] ^	1.6		ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 11:45	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	05/07/10 11:45	JKG	
Vinyl chloride [75-01-4] ^	3.5		ug/L	1	0.083	1.0	1	EPA 8260B	05/07/10 11:45	JKG	



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Description: 4103-II2B

Lab Sample ID: C004742-04

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 16:30

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.22	U	ug/L	1	0.22	1.0	5	EPA 8260B	05/07/10 11:45	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	46	1	50.0	92 %	51-122	0E06030	EPA 8260B	05/07/10 11:45	JKG		
Dibromofluoromethane	46	1	50.0	92 %	68-117	0E06030	EPA 8260B	05/07/10 11:45	JKG		
Toluene-d8	46	1	50.0	92 %	69-110	0E06030	EPA 8260B	05/07/10 11:45	JKG		

Description: 4103-II2B

Lab Sample ID: C004742-04

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 16:30

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC.SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	11		mg/L	1	0.018	5.0	NE	EPA 300.0	05/04/10 16:35	PEV	
Nitrate as N [14797-55-8] ^	0.021	U	mg/L	1	0.021	0.10	10000	EPA 353.2	05/04/10 13:38	PEV	
Sulfate as SO4 [14808-79-8] ^	21	J	mg/L	1	0.12	5.0	250000	EPA 300.0	05/04/10 16:35	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1000	SM18 4500-S D	05/03/10 12:04	JOC	
Total Alkalinity [471-34-1] ^	200	D	mg/L	2	16	30	NE	EPA 310.2	05/04/10 10:38	PEV	

Description: 4103-II2B
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C004742-04
Sampled: 04/29/10 16:30
Sampled By: Gary Simcox

Received: 04/30/10 13:15
Work Order: C004742

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	2.1		mg/L	1	0.32	1.0	NE	SM18 53108	05/12/10 17:58	RSA	

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	354	D	mg/L	10	7.80	25.0	NE	RSK 175	05/06/10 09:06	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:16	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:16	LAC	
Methane [74-82-8]	1.33		mg/L	1	0.0002	0.001	NE	RSK 175	05/05/10 12:16	LAC	



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Description: 4103-II2B

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C004742-04

Sampled: 04/29/10 16:30

Sampled By: Gary Simcox

Received: 04/30/10 13:15

Work Order: C004742

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.083	U	mg/L	1	0.083	0.50	NE	Volatile Fatty Acids	05/05/10 19:02	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	05/05/10 19:02	MEF	
Hexanoic Acid [142-62-1]	0.23	U	mg/L	1	0.23	1.0		Volatile Fatty Acids	05/05/10 19:02	MEF	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.16	U	mg/L	1	0.16	0.50		Volatile Fatty Acids	05/05/10 19:02	MEF	
iso-Hexanoic Acid [646-07-1]	0.21	U	mg/L	1	0.21	1.0		Volatile Fatty Acids	05/05/10 19:02	MEF	
iso-Pentanoic Acid [503-74-2]	0.26	U	mg/L	1	0.26	0.50		Volatile Fatty Acids	05/05/10 19:02	MEF	
Lactic Acid [50-21-5]	0.44	U	mg/L	1	0.44	0.50	NE	Volatile Fatty Acids	05/05/10 19:02	MEF	
Pentanoic Acid [109-52-4]	0.27	U	mg/L	1	0.27	0.50		Volatile Fatty Acids	05/05/10 19:02	MEF	
Propionic Acid [79-09-4]	0.18	U	mg/L	1	0.18	0.50	NE	Volatile Fatty Acids	05/05/10 19:02	MEF	
Pyruvic Acid [127-17-3]	0.14	U	mg/L	1	0.14	0.50	NE	Volatile Fatty Acids	05/05/10 19:02	MEF	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	59	1	50.0	117 %	80-124	0E05002	Volatile Fatty Acids	05/05/10 19:02	MEF	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

Description: 4103-II7

Lab Sample ID: C004742-05

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 12:50

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.091	U	ug/L	1	0.091	1.0	5	EPA 8260B	05/07/10 12:14	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.085	U	ug/L	1	0.085	1.0	3	EPA 8260B	05/07/10 12:14	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.068	U	ug/L	1	0.068	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
1,1-Dichloroethane [75-34-3] ^	1.3	J	ug/L	1	0.050	1.0	5	EPA 8260B	05/07/10 12:14	JKG	
1,1-Dichloroethene [75-35-4] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	05/07/10 12:14	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	05/07/10 12:14	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.052	U	ug/L	1	0.052	1.0	5	EPA 8260B	05/07/10 12:14	JKG	
1,2-Dichloroethane [107-06-2] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
1,2-Dichloropropane [78-87-5] ^	0.098	U	ug/L	1	0.098	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.43	J	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	05/07/10 12:14	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	05/07/10 12:14	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	05/07/10 12:14	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	05/07/10 12:14	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	05/07/10 12:14	JKG	
Benzene [71-43-2] ^	0.68	J	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
Bromochloromethane [74-97-5] ^	0.11	U	ug/L	1	0.11	1.0	3	EPA 8260B	05/07/10 12:14	JKG	
Bromodichloromethane [75-27-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
Bromoform [75-25-2] ^	0.20	U	ug/L	1	0.20	1.0	3	EPA 8260B	05/07/10 12:14	JKG	
Bromomethane [74-83-9] ^	0.28	U	ug/L	1	0.28	1.0	10	EPA 8260B	05/07/10 12:14	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	05/07/10 12:14	JKG	
Carbon tetrachloride [56-23-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
Chlorobenzene [108-90-7] ^	0.069	U	ug/L	1	0.069	1.0	3	EPA 8260B	05/07/10 12:14	JKG	
Chloroethane [75-00-3] ^	0.18	U	ug/L	1	0.18	1.0	10	EPA 8260B	05/07/10 12:14	JKG	
Chloroform [67-66-3] ^	0.083	U	ug/L	1	0.083	1.0	5	EPA 8260B	05/07/10 12:14	JKG	
Chloromethane [74-87-3] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	3.5	J	ug/L	1	0.075	1.0	5	EPA 8260B	05/07/10 12:14	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.073	U	ug/L	1	0.073	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
Dibromochloromethane [124-48-1] ^	0.067	U	ug/L	1	0.067	1.0	3	EPA 8260B	05/07/10 12:14	JKG	
Dibromomethane [74-95-3] ^	0.13	U	ug/L	1	0.13	1.0	10	EPA 8260B	05/07/10 12:14	JKG	
Ethylbenzene [100-41-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	05/07/10 12:14	JKG	
Methylene chloride [75-09-2] ^	0.070	U	ug/L	1	0.070	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
Styrene [100-42-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
Tetrachloroethene [127-18-4] ^	0.40	J	ug/L	1	0.099	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
Toluene [108-88-3] ^	0.59	J	ug/L	1	0.053	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	05/07/10 12:14	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.080	U	ug/L	1	0.080	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	05/07/10 12:14	JKG	
Trichloroethene [79-01-6] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
Trichlorofluoromethane [75-69-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 12:14	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	05/07/10 12:14	JKG	
Vinyl chloride [75-01-4] ^	0.75	J	ug/L	1	0.083	1.0	1	EPA 8260B	05/07/10 12:14	JKG	

Description: 4103-II7

Lab Sample ID: C004742-05

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 12:50

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.22	U	ug/L	1	0.22	1.0	5	EPA 8260B	05/07/10 12:14	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	45	1	50.0	90 %	51-122	0E06030	EPA 8260B	05/07/10 12:14	JKG	
Dibromofluoromethane	48	1	50.0	97 %	68-117	0E06030	EPA 8260B	05/07/10 12:14	JKG	
Toluene-d8	47	1	50.0	94 %	69-110	0E06030	EPA 8260B	05/07/10 12:14	JKG	

Description: 4103-II7

Lab Sample ID: C004742-05

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 12:50

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	18		mg/L	1	0.018	5.0	NE	EPA 300.0	05/04/10 17:37	PEV	
Nitrate as N [14797-55-8] ^	0.021	U	mg/L	1	0.021	0.10	10000	EPA 353.2	05/04/10 13:38	PEV	
Sulfate as SO4 [14808-79-8] ^	14	J	mg/L	1	0.12	5.0	250000	EPA 300.0	05/04/10 17:37	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1000	SM18 4500-S D	05/03/10 12:04	JOC	
Total Alkalinity [471-34-1] ^	70		mg/L	1	8.0	15	NE	EPA 310.2	05/04/10 10:39	PEV	



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Description: 4103-II7

Lab Sample ID: C004742-05

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 12:50

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	3.5		mg/L	1	0.32	1.0	NE	SM18 5310B	05/12/10 17:58	RSA	

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	430	D	mg/L	10	7.80	25.0	NE	RSK 175	05/07/10 09:57	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:20	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:20	LAC	
Methane [74-82-8]	0.029		mg/L	1	0.0002	0.001	NE	RSK 175	05/05/10 12:20	LAC	

Description: 4103-II7

Lab Sample ID: C004742-05

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 12:50

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.083	U	mg/L	1	0.083	0.50	NE	Volatile Fatty Acids	05/05/10 20:05	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	05/05/10 20:05	MEF	
Hexanoic Acid [142-62-1]	0.23	U	mg/L	1	0.23	1.0		Volatile Fatty Acids	05/05/10 20:05	MEF	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.16	U	mg/L	1	0.16	0.50		Volatile Fatty Acids	05/05/10 20:05	MEF	
iso-Hexanoic Acid [646-07-1]	0.21	U	mg/L	1	0.21	1.0		Volatile Fatty Acids	05/05/10 20:05	MEF	
iso-Pentanoic Acid [503-74-2]	0.26	U	mg/L	1	0.26	0.50		Volatile Fatty Acids	05/05/10 20:05	MEF	
Lactic Acid [50-21-5]	0.44	U	mg/L	1	0.44	0.50	NE	Volatile Fatty Acids	05/05/10 20:05	MEF	
Pentanoic Acid [109-52-4]	0.27	U	mg/L	1	0.27	0.50		Volatile Fatty Acids	05/05/10 20:05	MEF	
Propionic Acid [79-09-4]	0.18	U	mg/L	1	0.18	0.50	NE	Volatile Fatty Acids	05/05/10 20:05	MEF	
Pyruvic Acid [127-17-3]	0.14	U	mg/L	1	0.14	0.50	NE	Volatile Fatty Acids	05/05/10 20:05	MEF	
<hr/>											
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
Trimethylacetic acid	60	1	50.0	120 %	80-124	0E05002	Volatile Fatty Acids	05/05/10 20:05	MEF		

Description: 4103-II7B

Lab Sample ID: C004742-06

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 11:30

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.091	U	ug/L	1	0.091	1.0	5	EPA 8260B	05/07/10 12:43	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.085	U	ug/L	1	0.085	1.0	3	EPA 8260B	05/07/10 12:43	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.068	U	ug/L	1	0.068	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
1,1-Dichloroethane [75-34-3] ^	0.050	U	ug/L	1	0.050	1.0	5	EPA 8260B	05/07/10 12:43	JKG	
1,1-Dichloroethene [75-35-4] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	05/07/10 12:43	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	05/07/10 12:43	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.052	U	ug/L	1	0.052	1.0	5	EPA 8260B	05/07/10 12:43	JKG	
1,2-Dichloroethane [107-06-2] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
1,2-Dichloropropane [78-87-5] ^	0.098	U	ug/L	1	0.098	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	05/07/10 12:43	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	05/07/10 12:43	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	05/07/10 12:43	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	05/07/10 12:43	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	05/07/10 12:43	JKG	
Benzene [71-43-2] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
Bromochloromethane [74-97-5] ^	0.11	U	ug/L	1	0.11	1.0	3	EPA 8260B	05/07/10 12:43	JKG	
Bromodichloromethane [75-27-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
Bromoform [75-25-2] ^	0.20	U	ug/L	1	0.20	1.0	3	EPA 8260B	05/07/10 12:43	JKG	
Bromomethane [74-83-9] ^	0.28	U	ug/L	1	0.28	1.0	10	EPA 8260B	05/07/10 12:43	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	05/07/10 12:43	JKG	
Carbon tetrachloride [56-23-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
Chlorobenzene [108-90-7] ^	0.069	U	ug/L	1	0.069	1.0	3	EPA 8260B	05/07/10 12:43	JKG	
Chloroethane [75-00-3] ^	0.18	U	ug/L	1	0.18	1.0	10	EPA 8260B	05/07/10 12:43	JKG	
Chloroform [67-66-3] ^	0.083	U	ug/L	1	0.083	1.0	5	EPA 8260B	05/07/10 12:43	JKG	
Chloromethane [74-87-3] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.075	U	ug/L	1	0.075	1.0	5	EPA 8260B	05/07/10 12:43	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.073	U	ug/L	1	0.073	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
Dibromochloromethane [124-48-1] ^	0.067	U	ug/L	1	0.067	1.0	3	EPA 8260B	05/07/10 12:43	JKG	
Dibromomethane [74-95-3] ^	0.13	U	ug/L	1	0.13	1.0	10	EPA 8260B	05/07/10 12:43	JKG	
Ethylbenzene [100-41-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	05/07/10 12:43	JKG	
Methylene chloride [75-09-2] ^	0.070	U	ug/L	1	0.070	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
Styrene [100-42-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
Tetrachloroethene [127-18-4] ^	0.45	J	ug/L	1	0.099	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
Toluene [108-88-3] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	05/07/10 12:43	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.080	U	ug/L	1	0.080	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	05/07/10 12:43	JKG	
Trichloroethene [79-01-6] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
Trichlorofluoromethane [75-69-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 12:43	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	05/07/10 12:43	JKG	
Vinyl chloride [75-01-4] ^	0.083	U	ug/L	1	0.083	1.0	1	EPA 8260B	05/07/10 12:43	JKG	

Description: 4103-II7B
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C004742-06
Sampled: 04/29/10 11:30
Sampled By: Gary Simcox

Received: 04/30/10 13:15
Work Order: C004742

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.22	U	ug/L	1	0.22	1.0	5	EPA 8260B	05/07/10 12:43	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	45	1	50.0	90 %	51-122	0E06030	EPA 8260B	05/07/10 12:43	JKG		
Dibromofluoromethane	47	1	50.0	94 %	68-117	0E06030	EPA 8260B	05/07/10 12:43	JKG		
Toluene-d8	47	1	50.0	94 %	69-110	0E06030	EPA 8260B	05/07/10 12:43	JKG		

Description: 4103-II7B
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C004742-06
Sampled: 04/29/10 11:30
Sampled By: Gary Simcox

Received: 04/30/10 13:15
Work Order: C004742

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	4.8	J	mg/L	1	0.018	5.0	NE	EPA 300.0	05/04/10 17:57	PEV	
Nitrate as N [14797-55-8] ^	0.23	J	mg/L	1	0.021	0.10	10000	EPA 353.2	05/04/10 13:38	PEV	
Sulfate as SO4 [14808-79-8] ^	100	JD	mg/L	2	0.24	10	250000	EPA 300.0	05/04/10 18:18	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1000	SM18 4500-S D	05/03/10 12:04	JOC	
Total Alkalinity [471-34-1] ^	110		mg/L	1	8.0	15	NE	EPA 310.2	05/04/10 10:42	PEV	

Description: 4103-II7B

Lab Sample ID: C004742-06

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 11:30

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	2.3		mg/L	1	0.32	1.0	NE	SM18 5310B	05/12/10 17:58	RSA	



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Description: 4103-II7B

Lab Sample ID: C004742-06

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 11:30

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Dissolved Gases by GC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Carbon dioxide [124-38-9]	0.780	U	mg/L	1	0.780	2.50	NE	RSK 175	05/05/10 12:24	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:24	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:24	LAC	
Methane [74-82-8]	0.002		mg/L	1	0.0002	0.001	NE	RSK 175	05/05/10 12:24	LAC	

Description: 4103-II7B

Lab Sample ID: C004742-06

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 11:30

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.083	U	mg/L	1	0.083	0.50	NE	Volatile Fatty Acids	05/05/10 21:08	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	05/05/10 21:08	MEF	
Hexanoic Acid [142-62-1]	0.23	U	mg/L	1	0.23	1.0		Volatile Fatty Acids	05/05/10 21:08	MEF	
HIIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.16	U*	mg/L	1	0.16	0.50		Volatile Fatty Acids	05/05/10 21:08	MEF	
iso-Hexanoic Acid [646-07-1]	0.21	U	mg/L	1	0.21	1.0		Volatile Fatty Acids	05/05/10 21:08	MEF	
iso-Pentanoic Acid [503-74-2]	0.26	U	mg/L	1	0.26	0.50		Volatile Fatty Acids	05/05/10 21:08	MEF	
Lactic Acid [50-21-5]	0.44	U	mg/L	1	0.44	0.50	NE	Volatile Fatty Acids	05/05/10 21:08	MEF	
Pentanoic Acid [109-52-4]	0.27	U	mg/L	1	0.27	0.50		Volatile Fatty Acids	05/05/10 21:08	MEF	
Propionic Acid [79-09-4]	0.18	U	mg/L	1	0.18	0.50	NE	Volatile Fatty Acids	05/05/10 21:08	MEF	
Pyruvic Acid [127-17-3]	0.14	U	mg/L	1	0.14	0.50	NE	Volatile Fatty Acids	05/05/10 21:08	MEF	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	59	1	50.0	117 %	80-124	0E05002	Volatile Fatty Acids	05/05/10 21:08	MEF	

Description: 4103-II9

Lab Sample ID: C004742-07

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 17:45

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.091	U	ug/L	1	0.091	1.0	5	EPA 8260B	05/07/10 13:12	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.085	U	ug/L	1	0.085	1.0	3	EPA 8260B	05/07/10 13:12	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.068	U	ug/L	1	0.068	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
1,1-Dichloroethane [75-34-3] ^	5.2		ug/L	1	0.050	1.0	5	EPA 8260B	05/07/10 13:12	JKG	
1,1-Dichloroethene [75-35-4] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	05/07/10 13:12	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	05/07/10 13:12	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.052	U	ug/L	1	0.052	1.0	5	EPA 8260B	05/07/10 13:12	JKG	
1,2-Dichloroethane [107-06-2] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
1,2-Dichloropropane [78-87-5] ^	0.098	U	ug/L	1	0.098	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	05/07/10 13:12	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	05/07/10 13:12	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	05/07/10 13:12	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	05/07/10 13:12	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	05/07/10 13:12	JKG	
Benzene [71-43-2] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
Bromochloromethane [74-97-5] ^	0.11	U	ug/L	1	0.11	1.0	3	EPA 8260B	05/07/10 13:12	JKG	
Bromodichloromethane [75-27-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
Bromoform [75-25-2] ^	0.20	U	ug/L	1	0.20	1.0	3	EPA 8260B	05/07/10 13:12	JKG	
Bromomethane [74-83-9] ^	0.28	U	ug/L	1	0.28	1.0	10	EPA 8260B	05/07/10 13:12	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	05/07/10 13:12	JKG	
Carbon tetrachloride [56-23-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
Chlorobenzene [108-90-7] ^	0.069	U	ug/L	1	0.069	1.0	3	EPA 8260B	05/07/10 13:12	JKG	
Chloroethane [75-00-3] ^	0.18	U	ug/L	1	0.18	1.0	10	EPA 8260B	05/07/10 13:12	JKG	
Chloroform [67-66-3] ^	0.083	U	ug/L	1	0.083	1.0	5	EPA 8260B	05/07/10 13:12	JKG	
Chloromethane [74-87-3] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	11		ug/L	1	0.075	1.0	5	EPA 8260B	05/07/10 13:12	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.073	U	ug/L	1	0.073	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
Dibromochloromethane [124-48-1] ^	0.067	U	ug/L	1	0.067	1.0	3	EPA 8260B	05/07/10 13:12	JKG	
Dibromomethane [74-95-3] ^	0.13	U	ug/L	1	0.13	1.0	10	EPA 8260B	05/07/10 13:12	JKG	
Ethylbenzene [100-41-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	05/07/10 13:12	JKG	
Methylene chloride [75-09-2] ^	0.070	U	ug/L	1	0.070	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
Styrene [100-42-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
Tetrachloroethene [127-18-4] ^	0.099	U	ug/L	1	0.099	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
Toluene [108-88-3] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	05/07/10 13:12	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.080	U	ug/L	1	0.080	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	05/07/10 13:12	JKG	
Trichloroethene [79-01-6] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
Trichlorofluoromethane [75-69-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 13:12	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	05/07/10 13:12	JKG	
Vinyl chloride [75-01-4] ^	0.66	J	ug/L	1	0.083	1.0	1	EPA 8260B	05/07/10 13:12	JKG	

Description: 4103-II9

Lab Sample ID: C004742-07

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 17:45

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.22	U	ug/L	1	0.22	1.0	5	EPA 8260B	05/07/10 13:12	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	46	1	50.0	92 %	51-122	0E06030	EPA 8260B	05/07/10 13:12	JKG	
Dibromofluoromethane	46	1	50.0	92 %	68-117	0E06030	EPA 8260B	05/07/10 13:12	JKG	
Toluene-d8	46	1	50.0	92 %	69-110	0E06030	EPA 8260B	05/07/10 13:12	JKG	

Description: 4103-II9

Lab Sample ID: C004742-07

Received: 04/30/10 13:15

Matrix: Ground Water

Sampled: 04/29/10 17:45

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	12		mg/L	1	0.018	5.0	NE	EPA 300.0	05/04/10 18:39	PEV	
Nitrate as N [14797-55-8] ^	0.12	J	mg/L	1	0.021	0.10	10000	EPA 353.2	05/04/10 13:38	PEV	
Sulfate as SO4 [14808-79-8] ^	27	J	mg/L	1	0.12	5.0	250000	EPA 300.0	05/04/10 18:39	PEV	
Sulfide [18496-25-8] ^	0.031	U	mg/L	1	0.031	0.10	1000	SM18 4500-S D	05/03/10 12:04	JOC	
Total Alkalinity [471-34-1] ^	110	D	mg/L	2	16	30	NE	EPA 310.2	05/04/10 11:17	PEV	

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	4.5		mg/L	1	0.32	1.0	NE	SM18 5310B	05/12/10 17:58	RSA	

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	295	D	mg/L	10	7.80	25.0	NE	RSK 175	05/06/10 09:14	LAC	
Ethane [74-84-0]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:28	LAC	
Ethene [74-85-1]	0.0004	U	mg/L	1	0.0004	0.002	NE	RSK 175	05/05/10 12:28	LAC	
Methane [74-82-8]	0.006		mg/L	1	0.0002	0.001	NE	RSK 175	05/05/10 12:28	LAC	

Description: 4103-II9
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C004742-07
Sampled: 04/29/10 17:45
Sampled By: Gary Simcox

Received: 04/30/10 13:15
Work Order: C004742

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	0.083	U	mg/L	1	0.083	0.50	NE	Volatile Fatty Acids	05/05/10 22:10	MEF	
Butyric Acid [107-92-6]	0.16	U	mg/L	1	0.16	0.50	NE	Volatile Fatty Acids	05/05/10 22:10	MEF	
Hexanoic Acid [142-62-1]	0.23	U	mg/L	1	0.23	1.0		Volatile Fatty Acids	05/05/10 22:10	MEF	
HIIBA (2-Hydroxyisobutyric Acid) [594-61-6]	0.16	U	mg/L	1	0.16	0.50		Volatile Fatty Acids	05/05/10 22:10	MEF	
iso-Hexanoic Acid [646-07-1]	0.95		mg/L	1	0.21	1.0		Volatile Fatty Acids	05/05/10 22:10	MEF	
iso-Pentanoic Acid [503-74-2]	0.26	U	mg/L	1	0.26	0.50		Volatile Fatty Acids	05/05/10 22:10	MEF	
Lactic Acid [50-21-5]	0.44	U	mg/L	1	0.44	0.50	NE	Volatile Fatty Acids	05/05/10 22:10	MEF	
Pentanoic Acid [109-52-4]	0.27	U	mg/L	1	0.27	0.50		Volatile Fatty Acids	05/05/10 22:10	MEF	
Propionic Acid [79-09-4]	0.18	U	mg/L	1	0.18	0.50	NE	Volatile Fatty Acids	05/05/10 22:10	MEF	
Pyruvic Acid [127-17-3]	0.14	U	mg/L	1	0.14	0.50	NE	Volatile Fatty Acids	05/05/10 22:10	MEF	
<hr/>											
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
Trimethylacetic acid	59	1	50.0	118 %	80-124	0E05002	Volatile Fatty Acids	05/05/10 22:10	MEF		

Description: 4103-Trip Blank

Matrix: Water

Project: White Street Landfill MNA

Lab Sample ID: C004742-08

Sampled: 04/29/10 09:00

Sampled By: ENCO

Received: 04/30/10 13:15

Work Order: C004742

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.091	U	ug/L	1	0.091	1.0	5	EPA 8260B	05/07/10 13:42	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.085	U	ug/L	1	0.085	1.0	3	EPA 8260B	05/07/10 13:42	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.068	U	ug/L	1	0.068	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
1,1-Dichloroethane [75-34-3] ^	0.050	U	ug/L	1	0.050	1.0	5	EPA 8260B	05/07/10 13:42	JKG	
1,1-Dichloroethene [75-35-4] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	05/07/10 13:42	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	05/07/10 13:42	JKG	
1,2-Dibromoethane [106-93-4] ^	0.42	U	ug/L	1	0.42	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.052	U	ug/L	1	0.052	1.0	5	EPA 8260B	05/07/10 13:42	JKG	
1,2-Dichloroethane [107-06-2] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
1,2-Dichloropropane [78-87-5] ^	0.098	U	ug/L	1	0.098	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
2-Butanone [78-93-3] ^	1.0	U	ug/L	1	1.0	5.0	100	EPA 8260B	05/07/10 13:42	JKG	
2-Hexanone [591-78-6] ^	0.69	U	ug/L	1	0.69	5.0	50	EPA 8260B	05/07/10 13:42	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	05/07/10 13:42	JKG	
Acetone [67-64-1] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	05/07/10 13:42	JKG	
Acrylonitrile [107-13-1] ^	2.1	U	ug/L	1	2.1	10	200	EPA 8260B	05/07/10 13:42	JKG	
Benzene [71-43-2] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
Bromochloromethane [74-97-5] ^	0.11	U	ug/L	1	0.11	1.0	3	EPA 8260B	05/07/10 13:42	JKG	
Bromodichloromethane [75-27-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
Bromoform [75-25-2] ^	0.20	U	ug/L	1	0.20	1.0	3	EPA 8260B	05/07/10 13:42	JKG	
Bromomethane [74-83-9] ^	0.28	U	ug/L	1	0.28	1.0	10	EPA 8260B	05/07/10 13:42	JKG	
Carbon disulfide [75-15-0] ^	0.54	U	ug/L	1	0.54	5.0	100	EPA 8260B	05/07/10 13:42	JKG	
Carbon tetrachloride [56-23-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
Chlorobenzene [108-90-7] ^	0.069	U	ug/L	1	0.069	1.0	3	EPA 8260B	05/07/10 13:42	JKG	
Chloroethane [75-00-3] ^	0.18	U	ug/L	1	0.18	1.0	10	EPA 8260B	05/07/10 13:42	JKG	
Chloroform [67-66-3] ^	0.083	U	ug/L	1	0.083	1.0	5	EPA 8260B	05/07/10 13:42	JKG	
Chloromethane [74-87-3] ^	0.050	U	ug/L	1	0.050	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.075	U	ug/L	1	0.075	1.0	5	EPA 8260B	05/07/10 13:42	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.073	U	ug/L	1	0.073	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
Dibromochloromethane [124-48-1] ^	0.067	U	ug/L	1	0.067	1.0	3	EPA 8260B	05/07/10 13:42	JKG	
Dibromomethane [74-95-3] ^	0.13	U	ug/L	1	0.13	1.0	10	EPA 8260B	05/07/10 13:42	JKG	
Ethylbenzene [100-41-4] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
Iodomethane [74-88-4] ^	0.52	U	ug/L	1	0.52	5.0	10	EPA 8260B	05/07/10 13:42	JKG	
Methylene chloride [75-09-2] ^	0.070	U	ug/L	1	0.070	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
Styrene [100-42-5] ^	0.082	U	ug/L	1	0.082	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
Tetrachloroethene [127-18-4] ^	0.099	U	ug/L	1	0.099	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
Toluene [108-88-3] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	05/07/10 13:42	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.080	U	ug/L	1	0.080	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.54	U	ug/L	1	0.54	1.0	100	EPA 8260B	05/07/10 13:42	JKG	
Trichloroethene [79-01-6] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
Trichlorofluoromethane [75-69-4] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	05/07/10 13:42	JKG	
Vinyl acetate [108-05-4] ^	0.98	U	ug/L	1	0.98	5.0	50	EPA 8260B	05/07/10 13:42	JKG	
Vinyl chloride [75-01-4] ^	0.083	U	ug/L	1	0.083	1.0	1	EPA 8260B	05/07/10 13:42	JKG	

Description: 4103-Trip Blank

Lab Sample ID: C004742-08

Received: 04/30/10 13:15

Matrix: Water

Sampled: 04/29/10 09:00

Work Order: C004742

Project: White Street Landfill MNA

Sampled By: ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.22	U	ug/L	1	0.22	1.0	5	EPA 8260B	05/07/10 13:42	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	46	1	50.0	92 %	51-122	0E06030	EPA 8260B	05/07/10 13:42	JKG	
Dibromofluoromethane	47	1	50.0	94 %	68-117	0E06030	EPA 8260B	05/07/10 13:42	JKG	
Toluene-d8	47	1	50.0	93 %	69-110	0E06030	EPA 8260B	05/07/10 13:42	JKG	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 0E06030 - EPA 5030B_MS

Blank (0E06030-BLK1)

Prepared: 05/06/2010 15:38 Analyzed: 05/07/2010 03:10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.091	U	1.0	ug/L							
1,1,1-Trichloroethane	0.15	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.085	U	1.0	ug/L							
1,1,2-Trichloroethane	0.068	U	1.0	ug/L							
1,1-Dichloroethane	0.050	U	1.0	ug/L							
1,1-Dichloroethene	0.15	U	1.0	ug/L							
1,2,3-Trichloropropane	0.15	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.42	U	1.0	ug/L							
1,2-Dichlorobenzene	0.052	U	1.0	ug/L							
1,2-Dichloroethane	0.082	U	1.0	ug/L							
1,2-Dichloropropane	0.098	U	1.0	ug/L							
1,4-Dichlorobenzene	0.10	U	1.0	ug/L							
2-Butanone	1.0	U	5.0	ug/L							
2-Hexanone	0.69	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.5	U	5.0	ug/L							
Acrylonitrile	2.1	U	10	ug/L							
Benzene	0.050	U	1.0	ug/L							
Bromochloromethane	0.11	U	1.0	ug/L							
Bromodichloromethane	0.10	U	1.0	ug/L							
Bromoform	0.20	U	1.0	ug/L							
Bromomethane	0.28	U	1.0	ug/L							
Carbon disulfide	0.54	U	5.0	ug/L							
Carbon tetrachloride	0.082	U	1.0	ug/L							
Chlorobenzene	0.069	U	1.0	ug/L							
Chloroethane	0.18	U	1.0	ug/L							
Chloroform	0.083	U	1.0	ug/L							
Chloromethane	0.050	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.075	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.073	U	1.0	ug/L							
Dibromochloromethane	0.067	U	1.0	ug/L							
Dibromomethane	0.13	U	1.0	ug/L							
Ethylbenzene	0.10	U	1.0	ug/L							
Iodomethane	0.52	U	5.0	ug/L							
Methylene chloride	0.070	U	1.0	ug/L							
Styrene	0.082	U	1.0	ug/L							
Tetrachloroethene	0.099	U	1.0	ug/L							
Toluene	0.053	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.11	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.080	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.54	U	1.0	ug/L							
Trichloroethene	0.13	U	1.0	ug/L							
Trichlorofluoromethane	0.15	U	1.0	ug/L							
Vinyl acetate	0.98	U	5.0	ug/L							
Vinyl chloride	0.083	U	1.0	ug/L							
Xylenes (Total)	0.22	U	1.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	42			ug/L	50.0		84	57-131			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 0E06030 - EPA 5030B_MS

Blank (0E06030-BLK1) Continued

Prepared: 05/06/2010 15:38 Analyzed: 05/07/2010 03:10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: 4-Bromofluorobenzene	45			ug/L	50.0		90	51-122			
Surrogate: Dibromofluoromethane	42			ug/L	50.0		84	68-117			
Surrogate: Toluene-d8	46			ug/L	50.0		91	69-110			

LCS (0E06030-BS1)

Prepared: 05/06/2010 15:38 Analyzed: 05/07/2010 03:38

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	17		1.0	ug/L	20.0		87	75-133			
Benzene	18		1.0	ug/L	20.0		92	81-134			
Chlorobenzene	18		1.0	ug/L	20.0		91	83-117			
Toluene	19		1.0	ug/L	20.0		96	71-118			
Trichloroethene	17		1.0	ug/L	20.0		86	75-115			

Matrix Spike (0E06030-MS1)

Prepared: 05/06/2010 15:38 Analyzed: 05/07/2010 04:07

Source: C005033-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	18		1.0	ug/L	20.0	0.15 U	91	75-133			
Benzene	19		1.0	ug/L	20.0	0.050 U	93	81-134			
Chlorobenzene	18		1.0	ug/L	20.0	0.069 U	89	83-117			
Toluene	19		1.0	ug/L	20.0	0.053 U	97	71-118			
Trichloroethene	18		1.0	ug/L	20.0	0.13 U	88	75-115			

Matrix Spike Dup (0E06030-MSD1)

Prepared: 05/06/2010 15:38 Analyzed: 05/07/2010 04:35

Source: C005033-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	17		1.0	ug/L	20.0	0.15 U	85	75-133	7	20	
Benzene	18		1.0	ug/L	20.0	0.050 U	90	81-134	3	17	
Chlorobenzene	18		1.0	ug/L	20.0	0.069 U	90	83-117	2	16	
Toluene	19		1.0	ug/L	20.0	0.053 U	94	71-118	3	17	
Trichloroethene	17		1.0	ug/L	20.0	0.13 U	87	75-115	1	18	

Classical Chemistry Parameters - Quality Control

Batch 0E03009 - NO PREP

Blank (0E03009-BLK1)

Prepared & Analyzed: 05/03/2010 12:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.031	U	0.10	mg/L							

LCS (0E03009-BS1)

Prepared & Analyzed: 05/03/2010 12:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.39		0.10	mg/L	0.401		97	80-120			

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0E03009 - NO PREP

Matrix Spike (0E03009-MS1)

Prepared & Analyzed: 05/03/2010 12:04

Source: C003795-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.30		0.10	mg/L	0.401	-0.016	78	80-120			QM-07

Matrix Spike Dup (0E03009-MSD1)

Prepared & Analyzed: 05/03/2010 12:04

Source: C003795-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.29		0.10	mg/L	0.401	-0.016	75	80-120	3	25	QM-07

Batch 0E04002 - NO PREP

Blank (0E04002-BLK1)

Prepared: 05/04/2010 07:43 Analyzed: 05/04/2010 08:40

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	0.018	U	5.0	mg/L							
Sulfate as SO ₄	0.12	U	5.0	mg/L							

LCS (0E04002-BS1)

Prepared: 05/04/2010 07:43 Analyzed: 05/04/2010 09:21

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	50		5.0	mg/L	50.0		99	90-110			
Sulfate as SO ₄	49		5.0	mg/L	50.0		98	90-110			

Matrix Spike (0E04002-MS1)

Prepared: 05/04/2010 07:43 Analyzed: 05/04/2010 13:49

Source: C004742-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	53		5.0	mg/L	50.0	3.9	98	80-120			
Sulfate as SO ₄	50		5.0	mg/L	50.0	0.12 U	100	80-120			

Matrix Spike Dup (0E04002-MSD1)

Prepared: 05/04/2010 07:43 Analyzed: 05/04/2010 14:10

Source: C004742-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	53		5.0	mg/L	50.0	3.9	98	80-120	0.6	15	
Sulfate as SO ₄	49		5.0	mg/L	50.0	0.12 U	99	80-120	0.8	15	

Batch 0E04010 - NO PREP

Blank (0E04010-BLK1)

Prepared: 05/04/2010 09:39 Analyzed: 05/04/2010 10:31

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	8.0	U	15	mg/L							

LCS (0E04010-BS1)

Prepared: 05/04/2010 09:39 Analyzed: 05/04/2010 10:32

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0E04010 - NO PREP

LCS (0E04010-BS1) Continued

Prepared: 05/04/2010 09:39 Analyzed: 05/04/2010 10:32

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	99		15	mg/L	100		99	80-120			

Matrix Spike (0E04010-MS1)

Prepared: 05/04/2010 09:39 Analyzed: 05/04/2010 10:45

Source: C004901-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	100		15	mg/L	100	0.4	104	80-120			

Matrix Spike Dup (0E04010-MSD1)

Prepared: 05/04/2010 09:39 Analyzed: 05/04/2010 10:46

Source: C004901-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	100		15	mg/L	100	0.4	102	80-120	2	25	

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 0E05008 - NO PREP ANALYTIX

Blank (0E05008-BLK1)

Prepared: 05/05/2010 10:11 Analyzed: 05/05/2010 11:39

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	0.780	U	2.50	mg/L							
Ethane	0.0004	U	0.002	mg/L							
Ethene	0.0004	U	0.002	mg/L							
Methane	0.0002	U	0.001	mg/L							

LCS (0E05008-BS1)

Prepared: 05/05/2010 10:11 Analyzed: 05/05/2010 11:43

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	29.0		2.50	mg/L	26.3		110	71-119			
Ethane	0.157		0.002	mg/L	0.179		88	75-123			
Ethene	0.150		0.002	mg/L	0.167		90	72-131			
Methane	0.0858		0.001	mg/L	0.0958		90	74-116			

Matrix Spike (0E05008-MS1)

Prepared: 05/05/2010 10:11 Analyzed: 05/05/2010 11:52

Source: C004742-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	157		2.50	mg/L	26.3	111	173	71-119			QM-02
Ethane	0.168		0.002	mg/L	0.179	0.0004 U	94	75-123			
Ethene	0.163		0.002	mg/L	0.167	0.0004 U	98	72-131			
Methane	0.0897		0.001	mg/L	0.0958	0.0002 U	94	74-116			

Matrix Spike Dup (0E05008-MSD1)

Prepared: 05/05/2010 10:11 Analyzed: 05/05/2010 11:56

Source: C004742-01

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 0E05008 - NO PREP ANALYTIX

Matrix Spike Dup (0E05008-MSD1) Continued

Prepared: 05/05/2010 10:11 Analyzed: 05/05/2010 11:56

Source: C004742-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	155		2.50	mg/L	26.3	111	167	71-119	1	10	QM-02
Ethane	0.172		0.002	mg/L	0.179	0.0004 U	96	75-123	2	14	
Ethene	0.163		0.002	mg/L	0.167	0.0004 U	97	72-131	0.3	12	
Methane	0.0913		0.001	mg/L	0.0958	0.0002 U	95	74-116	2	18	

Volatile Fatty Acids by HPLC - Quality Control

Batch 0E05002 - NO PREP ANALYTIX

Blank (0E05002-BLK1)

Prepared: 05/05/2010 08:58 Analyzed: 05/05/2010 11:44

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	0.083	U	0.50	mg/L							
Butyric Acid	0.16	U	0.50	mg/L							
Hexanoic Acid	0.23	U	1.0	mg/L							
HTBA (2-Hydroxyisobutyric Acid)	0.16	U	0.50	mg/L							
iso-Hexanoic Acid	0.21	U	1.0	mg/L							
iso-Pentanoic Acid	0.26	U	0.50	mg/L							
Lactic Acid	0.44	U	0.50	mg/L							
Pentanoic Acid	0.27	U	0.50	mg/L							
Propionic Acid	0.18	U	0.50	mg/L							
Pyruvic Acid	0.14	U	0.50	mg/L							
Surrogate: Trimethylacetic acid	62			mg/L	50.0		123	80-124			

LCS (0E05002-BS1)

Prepared: 05/05/2010 08:58 Analyzed: 05/05/2010 12:47

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	19		0.50	mg/L	20.0		93	73-125			
Butyric Acid	24		0.50	mg/L	20.0		119	80-120			
Hexanoic Acid	22		1.0	mg/L	20.0		108	78-120			
HTBA (2-Hydroxyisobutyric Acid)	18		0.50	mg/L	20.0		91	80-120			
iso-Hexanoic Acid	18		1.0	mg/L	20.0		91	80-120			
iso-Pentanoic Acid	20		0.50	mg/L	20.0		99	78-120			
Lactic Acid	17		0.50	mg/L	20.0		83	56-154			
Pentanoic Acid	19		0.50	mg/L	20.0		97	77-120			
Propionic Acid	21		0.50	mg/L	20.0		104	80-120			
Pyruvic Acid	15		0.50	mg/L	20.0		73	37-142			
Surrogate: Trimethylacetic acid	57			mg/L	50.0		113	80-124			

Matrix Spike (0E05002-MS1)

Prepared: 05/05/2010 08:58 Analyzed: 05/05/2010 13:50

Source: C004742-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	19		0.50	mg/L	20.0	0.083 U	93	73-125			
Butyric Acid	23		0.50	mg/L	20.0	0.16 U	113	80-120			
Hexanoic Acid	21		1.0	mg/L	20.0	0.23 U	104	78-120			
HTBA (2-Hydroxyisobutyric Acid)	19		0.50	mg/L	20.0	0.16 U	93	80-120			

QUALITY CONTROL

Volatile Fatty Acids by HPLC - Quality Control

Batch 0E05002 - NO PREP ANALYTIX

Matrix Spike (0E05002-MS1) Continued

Prepared: 05/05/2010 08:58 Analyzed: 05/05/2010 13:50

Source: C004742-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
iso-Hexanoic Acid	17		1.0	mg/L	20.0	0.21 U	86	80-120			
iso-Pentanoic Acid	20		0.50	mg/L	20.0	0.26 U	102	78-120			
Lactic Acid	16		0.50	mg/L	20.0	0.44 U	79	56-154			
Pentanoic Acid	21		0.50	mg/L	20.0	0.27 U	106	77-120			
Propionic Acid	21		0.50	mg/L	20.0	0.18 U	105	80-120			
Pyruvic Acid	15		0.50	mg/L	20.0	0.14 U	73	37-142			
Surrogate: Trimethylacetic acid	56			mg/L	50.0		113	80-124			

Matrix Spike Dup (0E05002-MSD1)

Prepared: 05/05/2010 08:58 Analyzed: 05/05/2010 14:52

Source: C004742-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	19		0.50	mg/L	20.0	0.083 U	94	73-125	0.7	10	
Butyric Acid	22		0.50	mg/L	20.0	0.16 U	112	80-120	0.9	10	
Hexanoic Acid	20		1.0	mg/L	20.0	0.23 U	100	78-120	3	34	
HIBA (2-Hydroxyisobutyric Acid)	18		0.50	mg/L	20.0	0.16 U	92	80-120	0.09	15	
iso-Hexanoic Acid	18		1.0	mg/L	20.0	0.21 U	90	80-120	5	15	
iso-Pentanoic Acid	21		0.50	mg/L	20.0	0.26 U	104	78-120	2	15	
Lactic Acid	15		0.50	mg/L	20.0	0.44 U	76	56-154	4	19	
Pentanoic Acid	21		0.50	mg/L	20.0	0.27 U	103	77-120	3	10	
Propionic Acid	21		0.50	mg/L	20.0	0.18 U	106	80-120	0.7	10	
Pyruvic Acid	15		0.50	mg/L	20.0	0.14 U	74	37-142	0.4	10	
Surrogate: Trimethylacetic acid	56			mg/L	50.0		112	80-124			

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0E12003 - NO PREP

Blank (0E12003-BLK1)

Prepared: 05/12/2010 10:55 Analyzed: 05/12/2010 17:58

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	0.32	U	1.0	mg/L							

LCS (0E12003-BS1)

Prepared: 05/12/2010 10:55 Analyzed: 05/12/2010 17:58

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	40		1.0	mg/L	41.6		97	85-115			

Matrix Spike (0E12003-MS1)

Prepared: 05/12/2010 10:55 Analyzed: 05/12/2010 17:58

Source: C004742-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	41		1.0	mg/L	40.0	0.32	101	85-115			

Matrix Spike Dup (0E12003-MSD1)

Prepared: 05/12/2010 10:55 Analyzed: 05/12/2010 17:58

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0E12003 - NO PREP

Matrix Spike Dup (0E12003-MSD1) Continued

Prepared: 05/12/2010 10:55 Analyzed: 05/12/2010 17:58

Source: C004742-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	37		1.0	mg/L	40.0	0.32	92	85-115	9	21	

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
QM-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

407/75 Central Post Dr
Orlando, FL 32824
407/526-5314 Fax 407/852-8545

467-30961 Fax (191) 465-1611



Preservation: Ice HCl N INOJ S-12504 NO-N(3H) O & other details in comments!!

table. All examples submitted to EACOL have been in accordance with the format and requirements listed on the top page of this form unless their writers have otherwise noted.



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 1 of 8
Lab Proj #: P1005052
Report Date: 05/17/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

Laboratory Results

Total pages in data package: 9

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1005052-01	MW-14
P1005052-02	II-1
P1005052-03	II-2
P1005052-04	II-2B
P1005052-05	II-7
P1005052-06	II-7B
P1005052-07	II-9

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo **Date:** 5-17-10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

As a valued client we would appreciate your comments on our service.

Please call customer service at (412)826-5245 or email customerservice@microseeps.com.

Case Narrative: The samples were received approximately 1 week into the recommended holding times

Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 2 of 8
Lab Proj #: P1005052
Report Date: 05/17/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
MW-14	Vapor	P1005052-01	29 Apr. 10 15:25	05 May. 10 14:07

<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	3.400	0.600	nM	AM20GAX	5/13/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 3 of 8
Lab Proj #: P1005052
Report Date: 05/17/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-1	Vapor	P1005052-02	29 Apr. 10 10:25	05 May. 10 14:07		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	4.100	0.600	nM	AM20GAX	5/13/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 4 of 8
Lab Proj #: P1005052
Report Date: 05/17/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-2	Vapor	P1005052-03	29 Apr. 10 9:35	05 May. 10 14:07		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	4.500	0.600	nM	AM20GAX	5/13/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 5 of 8
Lab Proj #: P1005052
Report Date: 05/17/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-2B	Vapor	P1005052-04	29 Apr. 10 16:40	05 May. 10 14:07		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	3.800	0.600	nM	AM20GAX	5/13/10	sl



N - NELAC certified analysis

Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 6 of 8
Lab Proj #: P1005052
Report Date: 05/17/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-7	Vapor	P1005052-05	29 Apr. 10 13:25	05 May. 10 14:07		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	5.800	0.600	nM	AM20GAX	5/13/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 7 of 8
Lab Proj #: P1005052
Report Date: 05/17/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-7B	Vapor	P1005052-06	29 Apr. 10 12:00	05 May. 10 14:07		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	5.000	0.600	nM	AM20GAX	5/13/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 8 of 8
Lab Proj #: P1005052
Report Date: 05/17/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-9	Vapor	P1005052-07	29 Apr. 10 17:35	05 May. 10 14:07		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	3.600	0.600	nM	AM20GAX	5/13/10	sl



Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090 FAX: 919.467.3515



www.encolabs.com

Wednesday, August 18, 2010

S&ME, Inc. (SM004)

Attn: Connel Ware

3718 Old Battleground Rd.

Greensboro, NC 27410

RE: Laboratory Results for

Project Number: [none], Project Name/Desc: White Street Landfill MNA

ENCO Workorder: C009062

Dear Connel Ware,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Wednesday, August 4, 2010.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith". The signature is stylized with a large, looped "C" and a long, sweeping "S".

Chuck Smith

Project Manager

Enclosure(s)

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 4103-III		Lab ID: C009062-01		Sampled: 08/02/10 15:15		Received: 08/04/10 11:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	08/30/10	08/09/10	11:05	8/10/2010 02:25			
EPA 310.2	08/16/10	08/06/10	07:21	8/6/2010 08:27			
EPA 353.2	08/30/10	08/10/10	08:38	8/10/2010 10:02			
EPA 8260B	08/16/10	08/05/10	12:59	8/6/2010 16:52			
RSK-175	08/16/10	08/11/10	11:42	8/11/2010 13:39			
SM18 4500-S D	08/09/10	08/06/10	11:41	8/6/2010 11:51			
SM18 5310B		08/09/10	12:16				
VGC-13	08/16/10	08/11/10	10:43	8/12/2010 13:02			

Client ID: 4103-III		Lab ID: C009062-01RE1		Sampled: 08/02/10 15:15		Received: 08/04/10 11:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	08/30/10	08/09/10	11:05	8/10/2010 02:44			
RSK-175	08/16/10	08/11/10	11:42	8/11/2010 14:08			

Client ID: 4103-II2		Lab ID: C009062-02		Sampled: 08/03/10 10:10		Received: 08/04/10 11:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	08/31/10	08/09/10	11:05	8/10/2010 03:02			
EPA 310.2	08/17/10	08/06/10	07:21	8/6/2010 08:28			
EPA 353.2	08/31/10	08/10/10	08:38	8/10/2010 10:02			
EPA 8260B	08/17/10	08/05/10	12:59	8/6/2010 17:22			
RSK-175	08/17/10	08/11/10	11:42	8/11/2010 13:45			
SM18 4500-S D	08/10/10	08/06/10	11:41	8/6/2010 11:51			
SM18 5310B		08/09/10	12:16				
VGC-13	08/17/10	08/11/10	10:43	8/12/2010 14:05			

Client ID: 4103-II2B		Lab ID: C009062-03		Sampled: 08/03/10 08:30		Received: 08/04/10 11:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 300.0	08/31/10	08/09/10	11:05	8/10/2010 03:21			
EPA 353.2	08/31/10	08/10/10	08:38	8/10/2010 10:02			
EPA 8260B	08/17/10	08/05/10	12:59	8/6/2010 17:50			
RSK-175	08/17/10	08/11/10	11:42	8/11/2010 13:49			
SM18 4500-S D	08/10/10	08/06/10	11:41	8/6/2010 11:51			
SM18 5310B		08/09/10	12:16				
VGC-13	08/17/10	08/11/10	10:43	8/12/2010 15:07			

Client ID: 4103-II2B		Lab ID: C009062-03RE1		Sampled: 08/03/10 08:30		Received: 08/04/10 11:15	
Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)			
EPA 310.2	08/17/10	08/06/10	07:21	8/6/2010 09:17			
RSK-175	08/17/10	08/11/10	11:42	8/11/2010 14:12			



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Client ID:	4103-II7	Lab ID:	C009062-04	Sampled:	08/03/10 15:10	Received:	08/04/10 11:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)				
EPA 300.0	08/31/10	08/09/10 11:05	8/10/2010 03:40				
EPA 310.2	08/17/10	08/06/10 07:21	8/6/2010 08:32				
EPA 353.2	08/31/10	08/10/10 08:38	8/10/2010 10:02				
EPA 8260B	08/17/10	08/05/10 12:59	8/6/2010 18:20				
RSK-175	08/17/10	08/11/10 11:42	8/11/2010 13:53				
SM18 4500-S D	08/10/10	08/06/10 11:41	8/6/2010 11:51				
SM18 5310B		08/09/10 12:16					
VGC-13	08/17/10	08/11/10 10:43	8/12/2010 16:10				

Client ID:	4103-II7	Lab ID:	C009062-04RE1	Sampled:	08/03/10 15:10	Received:	08/04/10 11:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)				
RSK-175	08/17/10	08/11/10 11:42	8/11/2010 14:15				

Client ID:	4103-II7B	Lab ID:	C009062-05	Sampled:	08/03/10 13:30	Received:	08/04/10 11:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)				
EPA 300.0	08/31/10	08/09/10 11:05	8/10/2010 04:36				
EPA 310.2	08/17/10	08/06/10 07:21	8/6/2010 08:32				
EPA 353.2	08/31/10	08/10/10 08:38	8/10/2010 10:02				
EPA 8260B	08/17/10	08/05/10 12:59	8/6/2010 18:49				
RSK-175	08/17/10	08/11/10 11:42	8/11/2010 13:57				
SM18 4500-S D	08/10/10	08/06/10 11:41	8/6/2010 11:51				
SM18 5310B		08/09/10 12:16					
VGC-13	08/17/10	08/11/10 10:43	8/12/2010 17:13				

Client ID:	4103-II7B	Lab ID:	C009062-05RE1	Sampled:	08/03/10 13:30	Received:	08/04/10 11:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)				
EPA 300.0	08/31/10	08/09/10 11:05	8/10/2010 04:54				

Client ID:	4103-II9	Lab ID:	C009062-06	Sampled:	08/03/10 11:45	Received:	08/04/10 11:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)				
EPA 300.0	08/31/10	08/09/10 11:05	8/10/2010 05:13				
EPA 310.2	08/17/10	08/06/10 07:21	8/6/2010 08:33				
EPA 353.2	08/31/10	08/10/10 08:38	8/10/2010 10:02				
EPA 8260B	08/17/10	08/05/10 12:59	8/6/2010 19:18				
RSK-175	08/17/10	08/11/10 11:42	8/11/2010 14:00				
SM18 4500-S D	08/10/10	08/06/10 11:41	8/6/2010 11:51				
SM18 5310B		08/09/10 12:16					
VGC-13	08/17/10	08/11/10 10:43	8/12/2010 18:15				

Client ID:	4103-II9	Lab ID:	C009062-06RE1	Sampled:	08/03/10 11:45	Received:	08/04/10 11:15
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)				
RSK-175	08/17/10	08/11/10 11:42	8/11/2010 14:34				

Client ID: 4103-TripBlank	Lab ID: C009062-07	Sampled: 08/02/10 15:15	Received: 08/04/10 11:15
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	08/16/10	08/09/10 10:25	8/9/2010 18:20

Client ID: 4103-MW14	Lab ID: C009062-08	Sampled: 08/04/10 09:00	Received: 08/04/10 11:15
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Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	09/01/10	08/09/10 11:05	8/10/2010 05:32
EPA 310.2	08/18/10	08/06/10 07:21	8/6/2010 08:34
EPA 353.2	09/01/10	08/10/10 08:38	8/10/2010 10:02
EPA 8260B	08/18/10	08/09/10 10:25	8/9/2010 18:50
RSK-175	08/18/10	08/11/10 11:42	8/11/2010 14:04
SM18 4500-S D	08/11/10	08/06/10 11:41	8/6/2010 11:51
SM18 5310B		08/09/10 12:16	
VGC-13	08/18/10	08/11/10 10:43	8/12/2010 19:18

NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 4103-II1			Lab ID: C009062-01						
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Benzene	1.4		1	0.20	1.0	1	ug/L	EPA 8260B	
Chloroethane	1.5	J	1	0.30	1.0	10	ug/L	EPA 8260B	
cis-1,2-Dichloroethene	4.9	J	1	0.36	1.0	5	ug/L	EPA 8260B	
Methane	213		1	0.2	1	NE	ug/L	RSK-175	
Nitrate as N	62	J	1	25	100	10000	ug/L	EPA 353.2	
Sulfate as SO4	12000	J	1	120	5000	250000	ug/L	EPA 300.0	
Total Alkalinity	580000	D	5	40000	75000	NE	ug/L	EPA 310.2	
Total Organic Carbon	34000		1	320	1000	NE	ug/L	SM18 5310B	
Trichloroethene	0.62	J	1	0.38	1.0	1	ug/L	EPA 8260B	
Vinyl chloride	1.5		1	0.30	1.0	1	ug/L	EPA 8260B	

Client ID: 4103-II1			Lab ID: C009062-01RE1						
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	829000	D	10	7800	25000	NE	ug/L	RSK-175	
Chloride	410000	D	10	180	50000	NE	ug/L	EPA 300.0	

Client ID: 4103-II2			Lab ID: C009062-02						
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Benzene	0.88	J	1	0.20	1.0	1	ug/L	EPA 8260B	
Carbon dioxide	175000		1	780	2500	NE	ug/L	RSK-175	
Chloride	12000		1	18	5000	NE	ug/L	EPA 300.0	
cis-1,2-Dichloroethene	20		1	0.36	1.0	5	ug/L	EPA 8260B	
Methane	1300		1	0.2	1	NE	ug/L	RSK-175	
Nitrate as N	29	J	1	25	100	10000	ug/L	EPA 353.2	
Sulfate as SO4	21000	J	1	120	5000	250000	ug/L	EPA 300.0	
Total Alkalinity	460000	D	5	40000	75000	NE	ug/L	EPA 310.2	
Total Organic Carbon	1300		1	320	1000	NE	ug/L	SM18 5310B	
Trichloroethene	4.1		1	0.38	1.0	1	ug/L	EPA 8260B	
Vinyl chloride	4.8		1	0.30	1.0	1	ug/L	EPA 8260B	

Client ID: 4103-II2B			Lab ID: C009062-03						
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Benzene	0.98	J	1	0.20	1.0	1	ug/L	EPA 8260B	
Chloride	11000		1	18	5000	NE	ug/L	EPA 300.0	
cis-1,2-Dichloroethene	15		1	0.36	1.0	5	ug/L	EPA 8260B	
Methane	692		1	0.2	1	NE	ug/L	RSK-175	
Sulfate as SO4	21000	J	1	120	5000	250000	ug/L	EPA 300.0	
Total Organic Carbon	2400		1	320	1000	NE	ug/L	SM18 5310B	
Trichloroethene	2.8		1	0.38	1.0	1	ug/L	EPA 8260B	
Vinyl chloride	3.4		1	0.30	1.0	1	ug/L	EPA 8260B	

Client ID: 4103-II2B			Lab ID: C009062-03RE1						
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	341000	D	10	7800	25000	NE	ug/L	RSK-175	
Total Alkalinity	310000	D	2	16000	30000	NE	ug/L	EPA 310.2	

Client ID: 4103-II7			Lab ID: C009062-04						
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
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Client ID: 4103-II7		Lab ID: C009062-04							
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	16000		1	18	5000	NE	ug/L	EPA 300.0	
cis-1,2-Dichloroethene	0.71	J	1	0.36	1.0	5	ug/L	EPA 8260B	
Methane	10		1	0.2	1	NE	ug/L	RSK-175	
Nitrate as N	130	J	1	25	100	10000	ug/L	EPA 353.2	
Sulfate as SO ₄	12000	J	1	120	5000	250000	ug/L	EPA 300.0	
Total Alkalinity	51000		1	8000	15000	NE	ug/L	EPA 310.2	
Total Organic Carbon	2800		1	320	1000	NE	ug/L	SM18 5310B	

Client ID: 4103-II7		Lab ID: C009062-04RE1							
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	409000	D	10	7800	25000	NE	ug/L	RSK-175	

Client ID: 4103-II7B		Lab ID: C009062-05							
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	4800	J	1	18	5000	NE	ug/L	EPA 300.0	
Methane	3		1	0.2	1	NE	ug/L	RSK-175	
Nitrate as N	140	J	1	25	100	10000	ug/L	EPA 353.2	
Total Alkalinity	100000		1	8000	15000	NE	ug/L	EPA 310.2	
Total Organic Carbon	2300		1	320	1000	NE	ug/L	SM18 5310B	

Client ID: 4103-II7B		Lab ID: C009062-05RE1							
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Sulfate as SO ₄	100000	JD	2	240	10000	250000	ug/L	EPA 300.0	

Client ID: 4103-II9		Lab ID: C009062-06							
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	11000		1	18	5000	NE	ug/L	EPA 300.0	
Chloroethane	0.46	J	1	0.30	1.0	10	ug/L	EPA 8260B	
cis-1,2-Dichloroethene	20		1	0.36	1.0	5	ug/L	EPA 8260B	
Methane	30		1	0.2	1	NE	ug/L	RSK-175	
Nitrate as N	130	J	1	25	100	10000	ug/L	EPA 353.2	
Sulfate as SO ₄	15000	J	1	120	5000	250000	ug/L	EPA 300.0	
Total Alkalinity	320000	D	2	16000	30000	NE	ug/L	EPA 310.2	
Total Organic Carbon	3000		1	320	1000	NE	ug/L	SM18 5310B	
Vinyl chloride	2.6		1	0.30	1.0	1	ug/L	EPA 8260B	

Client ID: 4103-II9		Lab ID: C009062-06RE1							
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	307000	D	10	7800	25000	NE	ug/L	RSK-175	

Client ID: 4103-MW14		Lab ID: C009062-08							
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	126000		1	780	2500	NE	ug/L	RSK-175	
Chloride	3700	J	1	18	5000	NE	ug/L	EPA 300.0	
Sulfate as SO ₄	1500	J	1	120	5000	250000	ug/L	EPA 300.0	
Total Alkalinity	20000		1	8000	15000	NE	ug/L	EPA 310.2	
Total Organic Carbon	400	J	1	320	1000	NE	ug/L	SM18 5310B	

ANALYTICAL RESULTS

Description: 4103-III1

Lab Sample ID: C009062-01

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/02/10 15:15

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 16:52	JKG	
Benzene [71-43-2] ^	1.4		ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 16:52	JKG	
Chloroethane [75-00-3] ^	1.5	J	ug/L	1	0.30	1.0	10	EPA 8260B	08/06/10 16:52	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	4.9	J	ug/L	1	0.36	1.0	5	EPA 8260B	08/06/10 16:52	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 16:52	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	08/06/10 16:52	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	08/06/10 16:52	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 16:52	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/06/10 16:52	JKG	
Trichloroethene [79-01-6] ^	0.62	J	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 16:52	JKG	
Vinyl chloride [75-01-4] ^	1.5		ug/L	1	0.30	1.0	1	EPA 8260B	08/06/10 16:52	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 16:52	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
1,2-Dichloroethane-d4	51	1	50.0	102 %	57-131	0H05029	EPA 8260B	08/06/10 16:52	JKG	
4-Bromofluorobenzene	49	1	50.0	98 %	51-122	0H05029	EPA 8260B	08/06/10 16:52	JKG	
Dibromofluoromethane	49	1	50.0	97 %	68-117	0H05029	EPA 8260B	08/06/10 16:52	JKG	
Toluene-d8	47	1	50.0	95 %	69-110	0H05029	EPA 8260B	08/06/10 16:52	JKG	

Description: 4103-II1
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-01
Sampled: 08/02/10 15:15
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	410000	D	ug/L	10	180	50000	NE	EPA 300.0	08/10/10 02:44	PEV	
Nitrate as N [14797-55-8] ^	62	J	ug/L	1	25	100	10000	EPA 353.2	08/10/10 10:02	PEV	
Sulfate as SO4 [14808-79-8] ^	12000	J	ug/L	1	120	5000	250000	EPA 300.0	08/10/10 02:25	PEV	
Sulfide [18496-25-8] ^	31	U	ug/L	1	31	100	1000	SM18 4500-S D	08/06/10 11:51	JOC	
Total Alkalinity [471-34-1] ^	580000	D	ug/L	5	40000	75000	NE	EPA 310.2	08/06/10 08:27	PEV	

Description: 4103-II1
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-01
Sampled: 08/02/10 15:15
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	34000		ug/L	1	320	1000	NE	SM18 5310B	08/09/10 13:47	RSA	

Description: 4103-II1

Lab Sample ID: C009062-01

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/02/10 15:15

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	829000	D	ug/L	10	7800	25000	NE	RSK-175	08/11/10 14:08	LAC	
Ethane [74-84-0]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 13:39	LAC	
Ethene [74-85-1]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 13:39	LAC	
Methane [74-82-8]	213		ug/L	1	0.2	1	NE	RSK-175	08/11/10 13:39	LAC	

Description: 4103-II1
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-01
Sampled: 08/02/10 15:15
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	83	U	ug/L	1	83	500	NE	VGC-13	08/12/10 13:02	MEF	
Butyric Acid [107-92-6]	160	U	ug/L	1	160	500	NE	VGC-13	08/12/10 13:02	MEF	
Hexanoic Acid [142-62-1]	230	U	ug/L	1	230	1000		VGC-13	08/12/10 13:02	MEF	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	160	U	ug/L	1	160	500		VGC-13	08/12/10 13:02	MEF	
iso-Hexanoic Acid [646-07-1]	2600		ug/L	1	210	1000		VGC-13	08/12/10 13:02	MEF	
iso-Pentanoic Acid [503-74-2]	260	U	ug/L	1	260	500		VGC-13	08/12/10 13:02	MEF	
Lactic Acid [50-21-5]	440	U	ug/L	1	440	500	NE	VGC-13	08/12/10 13:02	MEF	
Pentanoic Acid [109-52-4]	270	U	ug/L	1	270	500		VGC-13	08/12/10 13:02	MEF	
Propionic Acid [79-09-4]	180	U	ug/L	1	180	500	NE	VGC-13	08/12/10 13:02	MEF	
Pyruvic Acid [127-17-3]	140	U	ug/L	1	140	500	NE	VGC-13	08/12/10 13:02	MEF	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch		Method	Analyzed	By	Notes
Trimethylacetic acid	59000	1	50000	117 %	80-124	0H11010		VGC-13	08/12/10 13:02	MEF	

Description: 4103-II2

Lab Sample ID: C009062-02

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 10:10

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 17:22	JKG	
Benzene [71-43-2] ^	0.88	J	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 17:22	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	08/06/10 17:22	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	20		ug/L	1	0.36	1.0	5	EPA 8260B	08/06/10 17:22	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 17:22	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	08/06/10 17:22	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	08/06/10 17:22	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 17:22	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/06/10 17:22	JKG	
Trichloroethene [79-01-6] ^	4.1		ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 17:22	JKG	
Vinyl chloride [75-01-4] ^	4.8		ug/L	1	0.30	1.0	1	EPA 8260B	08/06/10 17:22	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 17:22	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
1,2-Dichloroethane-d4	50	1	50.0	100 %	57-131	0H05029	EPA 8260B	08/06/10 17:22	JKG	
4-Bromofluorobenzene	49	1	50.0	99 %	51-122	0H05029	EPA 8260B	08/06/10 17:22	JKG	
Dibromofluoromethane	48	1	50.0	96 %	68-117	0H05029	EPA 8260B	08/06/10 17:22	JKG	
Toluene-d8	47	1	50.0	93 %	69-110	0H05029	EPA 8260B	08/06/10 17:22	JKG	

Description: 4103-II2
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-02
Sampled: 08/03/10 10:10
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	12000		ug/L	1	18	5000	NE	EPA 300.0	08/10/10 03:02	PEV	
Nitrate as N [14797-55-8] ^	29	J	ug/L	1	25	100	10000	EPA 353.2	08/10/10 10:02	PEV	
Sulfate as SO4 [14808-79-8] ^	21000	J	ug/L	1	120	5000	250000	EPA 300.0	08/10/10 03:02	PEV	
Sulfide [18496-25-8] ^	31	U	ug/L	1	31	100	1000	SM18 4500-S D	08/06/10 11:51	JOC	
Total Alkalinity [471-34-1] ^	460000	D	ug/L	5	40000	75000	NE	EPA 310.2	08/06/10 08:28	PEV	

Description: 4103-II2
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-02
Sampled: 08/03/10 10:10
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	1300		ug/L	1	320	1000	NE	SM18 5310B	08/09/10 13:47	RSA	

Description: 4103-II2

Lab Sample ID: C009062-02

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 10:10

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Dissolved Gases by GC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Carbon dioxide [124-38-9]	175000		ug/L	1	780	2500	NE	RSK-175	08/11/10 13:45	LAC	
Ethane [74-84-0]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 13:45	LAC	
Ethene [74-85-1]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 13:45	LAC	
Methane [74-82-8]	1300		ug/L	1	0.2	1	NE	RSK-175	08/11/10 13:45	LAC	

Description: 4103-II2
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-02
Sampled: 08/03/10 10:10
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Volatile Fatty Acids by HPLC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Acetic Acid [64-19-7]	83	U	ug/L	1	83	500	NE	VGC-13	08/12/10 14:05	MEF	
Butyric Acid [107-92-6]	160	U	ug/L	1	160	500	NE	VGC-13	08/12/10 14:05	MEF	
Hexanoic Acid [142-62-1]	230	U	ug/L	1	230	1000		VGC-13	08/12/10 14:05	MEF	
HLBA (2-Hydroxyisobutyric Acid) [594-61-6]	160	U	ug/L	1	160	500		VGC-13	08/12/10 14:05	MEF	
iso-Hexanoic Acid [646-07-1]	210	U	ug/L	1	210	1000		VGC-13	08/12/10 14:05	MEF	
iso-Pentanoic Acid [503-74-2]	260	U	ug/L	1	260	500		VGC-13	08/12/10 14:05	MEF	
Lactic Acid [50-21-5]	440	U	ug/L	1	440	500	NE	VGC-13	08/12/10 14:05	MEF	
Pentanoic Acid [109-52-4]	270	U	ug/L	1	270	500		VGC-13	08/12/10 14:05	MEF	
Propionic Acid [79-09-4]	180	U	ug/L	1	180	500	NE	VGC-13	08/12/10 14:05	MEF	
Pyruvic Acid [127-17-3]	140	U	ug/L	1	140	500	NE	VGC-13	08/12/10 14:05	MEF	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Trimethylacetic acid	55000	1	50000	110 %	80-124	0411010	VGC-13	08/12/10 14:05	MEF	

Description: 4103-II2B

Lab Sample ID: C009062-03

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 08:30

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 17:50	JKG	
Benzene [71-43-2] ^	0.98	J	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 17:50	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	08/06/10 17:50	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	15		ug/L	1	0.36	1.0	5	EPA 8260B	08/06/10 17:50	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 17:50	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	08/06/10 17:50	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	08/06/10 17:50	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 17:50	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/06/10 17:50	JKG	
Trichloroethene [79-01-6] ^	2.8		ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 17:50	JKG	
Vinyl chloride [75-01-4] ^	3.4		ug/L	1	0.30	1.0	1	EPA 8260B	08/06/10 17:50	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 17:50	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
1,2-Dichloroethane-d4	51	1	50.0	102 %	57-131	0H05029	EPA 8260B	08/06/10 17:50	JKG	
4-Bromofluorobenzene	50	1	50.0	100 %	51-122	0H05029	EPA 8260B	08/06/10 17:50	JKG	
Dibromofluoromethane	49	1	50.0	97 %	68-117	0H05029	EPA 8260B	08/06/10 17:50	JKG	
Toluene-d8	47	1	50.0	94 %	69-110	0H05029	EPA 8260B	08/06/10 17:50	JKG	

Description: 4103-II2B

Lab Sample ID: C009062-03

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 08:30

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	11000		ug/L	1	18	5000	NE	EPA 300.0	08/10/10 03:21	PEV	
Nitrate as N [14797-55-8] ^	25	U	ug/L	1	25	100	10000	EPA 353.2	08/10/10 10:02	PEV	
Sulfate as SO4 [14808-79-8] ^	21000	J	ug/L	1	120	5000	250000	EPA 300.0	08/10/10 03:21	PEV	
Sulfide [18496-25-8] ^	31	U	ug/L	1	31	100	1000	SM18 4500-S D	08/06/10 11:51	JOC	
Total Alkalinity [471-34-1] ^	310000	D	ug/L	2	16000	30000	NE	EPA 310.2	08/06/10 09:17	PEV	

Description: 4103-II2B

Lab Sample ID: C009062-03

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 08:30

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DE	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	2400		ug/L	1	320	1000	NE	SM18 5310B	08/09/10 13:47	RSA	

Description: 4103-II2B

Lab Sample ID: C009062-03

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 08:30

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Dissolved Gases by GC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Carbon dioxide [124-38-9]	341000	D	ug/L	10	7800	25000	NE	RSK-175	08/11/10 14:12	LAC	
Ethane [74-84-0]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 13:49	LAC	
Ethene [74-85-1]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 13:49	LAC	
Methane [74-82-8]	692		ug/L	1	0.2	1	NE	RSK-175	08/11/10 13:49	LAC	



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Description: 4103-II2B

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C009062-03

Sampled: 08/03/10 08:30

Sampled By: Gary Simcox

Received: 08/04/10 11:15

Work Order: C009062

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	83	U	ug/L	1	83	500	NE	VGC-13	08/12/10 15:07	MEF	
Butyric Acid [107-92-6]	160	U	ug/L	1	160	500	NE	VGC-13	08/12/10 15:07	MEF	
Hexanoic Acid [142-62-1]	230	U	ug/L	1	230	1000		VGC-13	08/12/10 15:07	MEF	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	160	U	ug/L	1	160	500		VGC-13	08/12/10 15:07	MEF	
iso-Hexanoic Acid [646-07-1]	210	U	ug/L	1	210	1000		VGC-13	08/12/10 15:07	MEF	
iso-Pentanoic Acid [503-74-2]	260	U	ug/L	1	260	500		VGC-13	08/12/10 15:07	MEF	
Lactic Acid [50-21-5]	440	U	ug/L	1	440	500	NE	VGC-13	08/12/10 15:07	MEF	
Pentanoic Acid [109-52-4]	270	U	ug/L	1	270	500		VGC-13	08/12/10 15:07	MEF	
Propionic Acid [79-09-4]	180	U	ug/L	1	180	500	NE	VGC-13	08/12/10 15:07	MEF	
Pyruvic Acid [127-17-3]	140	U	ug/L	1	140	500	NE	VGC-13	08/12/10 15:07	MEF	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	57000	1	50000	114 %	80-124	0H11010	VGC-13	08/12/10 15:07	MEF	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

Description: 4103-II7

Lab Sample ID: C009062-04

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 15:10

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 18:20	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 18:20	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	08/06/10 18:20	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.71	J	ug/L	1	0.36	1.0	5	EPA 8260B	08/06/10 18:20	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 18:20	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	08/06/10 18:20	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	08/06/10 18:20	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 18:20	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/06/10 18:20	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 18:20	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	08/06/10 18:20	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 18:20	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
1,2-Dichloroethane-d4	52	1	50.0	105 %	57-131	0H05029	EPA 8260B	08/06/10 18:20	JKG	
4-Bromofluorobenzene	50	1	50.0	99 %	51-122	0H05029	EPA 8260B	08/06/10 18:20	JKG	
Dibromofluoromethane	50	1	50.0	99 %	68-117	0H05029	EPA 8260B	08/06/10 18:20	JKG	
Toluene-d8	47	1	50.0	94 %	69-110	0H05029	EPA 8260B	08/06/10 18:20	JKG	

Description: 4103-II7
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-04
Sampled: 08/03/10 15:10
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	16000		ug/L	1	18	5000	NE	EPA 300.0	08/10/10 03:40	PEV	
Nitrate as N [14797-55-8] ^	130	J	ug/L	1	25	100	10000	EPA 353.2	08/10/10 10:02	PEV	
Sulfate as SO4 [14808-79-8] ^	12000	J	ug/L	1	120	5000	250000	EPA 300.0	08/10/10 03:40	PEV	
Sulfide [18496-25-8] ^	31	U	ug/L	1	31	100	1000	SM18 4500-S D	08/06/10 11:51	JOC	
Total Alkalinity [471-34-1] ^	51000		ug/L	1	8000	15000	NE	EPA 310.2	08/06/10 08:32	PEV	

Description: 4103-II7

Lab Sample ID: C009062-04

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 15:10

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	2800		ug/L	1	320	1000	NE	SM18 5310B	08/09/10 13:47	RSA	

Description: 4103-II7

Lab Sample ID: C009062-04

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 15:10

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	409000	D	ug/L	10	7800	25000	NE	RSK-175	08/11/10 14:15	LAC	
Ethane [74-84-0]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 13:53	LAC	
Ethene [74-85-1]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 13:53	LAC	
Methane [74-82-8]	10		ug/L	1	0.2	1	NE	RSK-175	08/11/10 13:53	LAC	

Description: 4103-II7
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-04
Sampled: 08/03/10 15:10
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	83	U	ug/L	1	83	500	NE	VGC-13	08/12/10 16:10	MEF	
Butyric Acid [107-92-6]	160	U	ug/L	1	160	500	NE	VGC-13	08/12/10 16:10	MEF	
Hexanoic Acid [142-62-1]	230	U	ug/L	1	230	1000		VGC-13	08/12/10 16:10	MEF	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	160	U	ug/L	1	160	500		VGC-13	08/12/10 16:10	MEF	
iso-Hexanoic Acid [646-07-1]	210	U	ug/L	1	210	1000		VGC-13	08/12/10 16:10	MEF	
iso-Pentanoic Acid [503-74-2]	260	U	ug/L	1	260	500		VGC-13	08/12/10 16:10	MEF	
Lactic Acid [50-21-5]	440	U	ug/L	1	440	500	NE	VGC-13	08/12/10 16:10	MEF	
Pentanoic Acid [109-52-4]	270	U	ug/L	1	270	500		VGC-13	08/12/10 16:10	MEF	
Propionic Acid [79-09-4]	180	U	ug/L	1	180	500	NE	VGC-13	08/12/10 16:10	MEF	
Pyruvic Acid [127-17-3]	140	U	ug/L	1	140	500	NE	VGC-13	08/12/10 16:10	MEF	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	57000	1	50000	113 %	80-124	0H11010	VGC-13	08/12/10 16:10	MEF	

Description: 4103-II7B

Lab Sample ID: C009062-05

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 13:30

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 18:49	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 18:49	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	08/06/10 18:49	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	08/06/10 18:49	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 18:49	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	08/06/10 18:49	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	08/06/10 18:49	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 18:49	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/06/10 18:49	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 18:49	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	08/06/10 18:49	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 18:49	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
1,2-Dichloroethane-d4	52	1	50.0	105 %	57-131	0H05029	EPA 8260B	08/06/10 18:49	JKG	
4-Bromofluorobenzene	49	1	50.0	98 %	51-122	0H05029	EPA 8260B	08/06/10 18:49	JKG	
Dibromofluoromethane	50	1	50.0	100 %	68-117	0H05029	EPA 8260B	08/06/10 18:49	JKG	
Toluene-d8	47	1	50.0	94 %	69-110	0H05029	EPA 8260B	08/06/10 18:49	JKG	

Description: 4103-II7B
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-05
Sampled: 08/03/10 13:30
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	4800	J	ug/L	1	18	5000	NE	EPA 300.0	08/10/10 04:36	PEV	
Nitrate as N [14797-55-8] ^	140	J	ug/L	1	25	100	10000	EPA 353.2	08/10/10 10:02	PEV	
Sulfate as SO4 [14808-79-8] ^	100000	JD	ug/L	2	240	10000	250000	EPA 300.0	08/10/10 04:54	PEV	
Sulfide [18496-25-8] ^	31	U	ug/L	1	31	100	1000	SM18 4500-S D	08/06/10 11:51	JOC	
Total Alkalinity [471-34-1] ^	100000		ug/L	1	8000	15000	NE	EPA 310.2	08/06/10 08:32	PEV	

Description: 4103-II7B
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-05
Sampled: 08/03/10 13:30
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC.SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	2300		ug/L	1	320	1000	NE	SM18 5310B	08/09/10 13:47	RSA	

Description: 4103-II7B

Lab Sample ID: C009062-05

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 13:30

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	780	U	ug/L	1	780	2500	NE	RSK-175	08/11/10 13:57	LAC	
Ethane [74-84-0]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 13:57	LAC	
Ethene [74-85-1]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 13:57	LAC	
Methane [74-82-8]	3		ug/L	1	0.2	1	NE	RSK-175	08/11/10 13:57	LAC	

Description: 4103-II7B

Lab Sample ID: C009062-05

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 13:30

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	83	U	ug/L	1	83	500	NE	VGC-13	08/12/10 17:13	MEF	
Butyric Acid [107-92-6]	160	U	ug/L	1	160	500	NE	VGC-13	08/12/10 17:13	MEF	
Hexanoic Acid [142-62-1]	230	U	ug/L	1	230	1000		VGC-13	08/12/10 17:13	MEF	
HIIBA (2-Hydroxyisobutyric Acid) [594-61-6]	160	U	ug/L	1	160	500		VGC-13	08/12/10 17:13	MEF	
iso-Hexanoic Acid [646-07-1]	210	U	ug/L	1	210	1000		VGC-13	08/12/10 17:13	MEF	
iso-Pentanoic Acid [503-74-2]	260	U	ug/L	1	260	500		VGC-13	08/12/10 17:13	MEF	
Lactic Acid [50-21-5]	440	U	ug/L	1	440	500	NE	VGC-13	08/12/10 17:13	MEF	
Pentanoic Acid [109-52-4]	270	U	ug/L	1	270	500		VGC-13	08/12/10 17:13	MEF	
Propionic Acid [79-09-4]	180	U	ug/L	1	180	500	NE	VGC-13	08/12/10 17:13	MEF	
Pyruvic Acid [127-17-3]	140	U	ug/L	1	140	500	NE	VGC-13	08/12/10 17:13	MEF	
<hr/>											
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch		Method	Analyzed	By	Notes
Trimethylacetic acid	58000	1	50000	116 %	80-124	0H11010		VGC-13	08/12/10 17:13	MEF	

Description: 4103-II9

Lab Sample ID: C009062-06

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/03/10 11:45

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 19:18	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 19:18	JKG	
Chloroethane [75-00-3] ^	0.46	J	ug/L	1	0.30	1.0	10	EPA 8260B	08/06/10 19:18	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	20		ug/L	1	0.36	1.0	5	EPA 8260B	08/06/10 19:18	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/06/10 19:18	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	08/06/10 19:18	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	08/06/10 19:18	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/06/10 19:18	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/06/10 19:18	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/06/10 19:18	JKG	
Vinyl chloride [75-01-4] ^	2.6		ug/L	1	0.30	1.0	1	EPA 8260B	08/06/10 19:18	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/06/10 19:18	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
1,2-Dichloroethane-d4	53	1	50.0	105 %	57-131	0H05029	EPA 8260B	08/06/10 19:18	JKG	
4-Bromofluorobenzene	50	1	50.0	100 %	51-122	0H05029	EPA 8260B	08/06/10 19:18	JKG	
Dibromofluoromethane	50	1	50.0	101 %	68-117	0H05029	EPA 8260B	08/06/10 19:18	JKG	
Toluene-d8	47	1	50.0	93 %	69-110	0H05029	EPA 8260B	08/06/10 19:18	JKG	

Description: 4103-II9
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-06
Sampled: 08/03/10 11:45
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	11000		ug/L	1	18	5000	NE	EPA 300.0	08/10/10 05:13	PEV	
Nitrate as N [14797-55-8] ^	130	J	ug/L	1	25	100	10000	EPA 353.2	08/10/10 10:02	PEV	
Sulfate as SO4 [14808-79-8] ^	15000	J	ug/L	1	120	5000	250000	EPA 300.0	08/10/10 05:13	PEV	
Sulfide [18496-25-8] ^	31	U	ug/L	1	31	100	1000	SM18 4500-S D	08/06/10 11:51	JOC	
Total Alkalinity [471-34-1] ^	320000	D	ug/L	2	16000	30000	NE	EPA 310.2	08/06/10 08:33	PEV	



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Description: 4103-II9

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C009062-06

Sampled: 08/03/10 11:45

Sampled By: Gary Simcox

Received: 08/04/10 11:15

Work Order: C009062

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	3000		ug/L	1	320	1000	NE	SM18 5310B	08/09/10 13:47	RSA	

Description: 4103-II9
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-06
Sampled: 08/03/10 11:45
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Dissolved Gases by GC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Carbon dioxide [124-38-9]	307000	D	ug/L	10	7800	25000	NE	RSK-175	08/11/10 14:34	LAC	
Ethane [74-84-0]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 14:00	LAC	
Ethene [74-85-1]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 14:00	LAC	
Methane [74-82-8]	30		ug/L	1	0.2	1	NE	RSK-175	08/11/10 14:00	LAC	

Description: 4103-II9
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-06
Sampled: 08/03/10 11:45
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	83	U	ug/L	1	83	500	NE	VGC-13	08/12/10 18:15	MEF	
Butyric Acid [107-92-6]	160	U	ug/L	1	160	500	NE	VGC-13	08/12/10 18:15	MEF	
Hexanoic Acid [142-62-1]	230	U	ug/L	1	230	1000		VGC-13	08/12/10 18:15	MEF	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	160	U	ug/L	1	160	500		VGC-13	08/12/10 18:15	MEF	
iso-Hexanoic Acid [646-07-1]	210	U	ug/L	1	210	1000		VGC-13	08/12/10 18:15	MEF	
iso-Pentanoic Acid [503-74-2]	260	U	ug/L	1	260	500		VGC-13	08/12/10 18:15	MEF	
Lactic Acid [50-21-5]	440	U	ug/L	1	440	500	NE	VGC-13	08/12/10 18:15	MEF	
Pentanoic Acid [109-52-4]	270	U	ug/L	1	270	500		VGC-13	08/12/10 18:15	MEF	
Propionic Acid [79-09-4]	180	U	ug/L	1	180	500	NE	VGC-13	08/12/10 18:15	MEF	
Pyruvic Acid [127-17-3]	140	U	ug/L	1	140	500	NE	VGC-13	08/12/10 18:15	MEF	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	58000	1	50000	116 %	80-124	0H11010	VGC-13	08/12/10 18:15	MEF	

Description: 4103-TripBlank

Lab Sample ID: C009062-07

Received: 08/04/10 11:15

Matrix: Water

Sampled: 08/02/10 15:15

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/09/10 18:20	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/09/10 18:20	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	08/09/10 18:20	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	08/09/10 18:20	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/09/10 18:20	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	08/09/10 18:20	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	08/09/10 18:20	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/09/10 18:20	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/09/10 18:20	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/09/10 18:20	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	08/09/10 18:20	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/09/10 18:20	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
1,2-Dichloroethane-d4	47	1	50.0	94 %	57-131	0H09012	EPA 8260B	08/09/10 18:20	JKG	
4-Bromofluorobenzene	41	1	50.0	83 %	51-122	0H09012	EPA 8260B	08/09/10 18:20	JKG	
Dibromofluoromethane	45	1	50.0	90 %	68-117	0H09012	EPA 8260B	08/09/10 18:20	JKG	
Toluene-d8	43	1	50.0	87 %	69-110	0H09012	EPA 8260B	08/09/10 18:20	JKG	

Description: 4103-MW14

Lab Sample ID: C009062-08

Received: 08/04/10 11:15

Matrix: Ground Water

Sampled: 08/04/10 09:00

Work Order: C009062

Project: White Street Landfill MNA

Sampled By: Gary Simcox

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/09/10 18:50	JKG	
Benzene [71-43-2] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/09/10 18:50	JKG	
Chloroethane [75-00-3] ^	0.30	U	ug/L	1	0.30	1.0	10	EPA 8260B	08/09/10 18:50	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.36	U	ug/L	1	0.36	1.0	5	EPA 8260B	08/09/10 18:50	JKG	
Ethylbenzene [100-41-4] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	08/09/10 18:50	JKG	
m,p-Xylenes [108-38-3/106-42-3] ^	0.48	U	ug/L	1	0.48	2.0	NE	EPA 8260B	08/09/10 18:50	JKG	
o-Xylene [95-47-6] ^	0.27	U	ug/L	1	0.27	1.0	NE	EPA 8260B	08/09/10 18:50	JKG	
Toluene [108-88-3] ^	0.27	U	ug/L	1	0.27	1.0	1	EPA 8260B	08/09/10 18:50	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.34	U	ug/L	1	0.34	1.0	5	EPA 8260B	08/09/10 18:50	JKG	
Trichloroethene [79-01-6] ^	0.38	U	ug/L	1	0.38	1.0	1	EPA 8260B	08/09/10 18:50	JKG	
Vinyl chloride [75-01-4] ^	0.30	U	ug/L	1	0.30	1.0	1	EPA 8260B	08/09/10 18:50	JKG	
Xylenes (Total) [1330-20-7] ^	0.40	U	ug/L	1	0.40	1.0	5	EPA 8260B	08/09/10 18:50	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
1,2-Dichloroethane-d4	47	1	50.0	94 %	57-131	0H09012	EPA 8260B	08/09/10 18:50	JKG	
4-Bromofluorobenzene	40	1	50.0	80 %	51-122	0H09012	EPA 8260B	08/09/10 18:50	JKG	
Dibromofluoromethane	45	1	50.0	90 %	68-117	0H09012	EPA 8260B	08/09/10 18:50	JKG	
Toluene-d8	43	1	50.0	85 %	69-110	0H09012	EPA 8260B	08/09/10 18:50	JKG	

Description: 4103-MW14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-08
Sampled: 08/04/10 09:00
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	3700	J	ug/L	1	18	5000	NE	EPA 300.0	08/10/10 05:32	PEV	
Nitrate as N [14797-55-8] ^	25	U	ug/L	1	25	100	10000	EPA 353.2	08/10/10 10:02	PEV	
Sulfate as SO4 [14808-79-8] ^	1500	J	ug/L	1	120	5000	250000	EPA 300.0	08/10/10 05:32	PEV	
Sulfide [18496-25-8] ^	31	U	ug/L	1	31	100	1000	SM18 4500-S D	08/06/10 11:51	JOC	
Total Alkalinity [471-34-1] ^	20000		ug/L	1	8000	15000	NE	EPA 310.2	08/06/10 08:34	PEV	

Description: 4103-MW14**Matrix:** Ground Water**Project:** White Street Landfill MNA**Lab Sample ID:** C009062-08**Sampled:** 08/04/10 09:00**Sampled By:** Gary Simcox**Received:** 08/04/10 11:15**Work Order:** C009062

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	400	J	ug/L	1	320	1000	NE	SM18 5310B	08/09/10 13:47	RSA	

Description: 4103-MW14

Matrix: Ground Water

Project: White Street Landfill MNA

Lab Sample ID: C009062-08

Sampled: 08/04/10 09:00

Sampled By: Gary Simcox

Received: 08/04/10 11:15

Work Order: C009062

Dissolved Gases by GC

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>NC SWSL</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Carbon dioxide [124-38-9]	126000		ug/L	1	780	2500	NE	RSK-175	08/11/10 14:04	LAC	
Ethane [74-84-0]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 14:04	LAC	
Ethene [74-85-1]	0.4	U	ug/L	1	0.4	2	NE	RSK-175	08/11/10 14:04	LAC	
Methane [74-82-8]	0.2	U	ug/L	1	0.2	1	NE	RSK-175	08/11/10 14:04	LAC	

Description: 4103-MW14
Matrix: Ground Water
Project: White Street Landfill MNA

Lab Sample ID: C009062-08
Sampled: 08/04/10 09:00
Sampled By: Gary Simcox

Received: 08/04/10 11:15
Work Order: C009062

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	83	U	ug/L	1	83	500	NE	VGC-13	08/12/10 19:18	MEF	
Butyric Acid [107-92-6]	160	U	ug/L	1	160	500	NE	VGC-13	08/12/10 19:18	MEF	
Hexanoic Acid [142-62-1]	230	U	ug/L	1	230	1000		VGC-13	08/12/10 19:18	MEF	
HIIBA (2-Hydroxyisobutyric Acid) [594-61-6]	160	U	ug/L	1	160	500		VGC-13	08/12/10 19:18	MEF	
iso-Hexanoic Acid [646-07-1]	210	U	ug/L	1	210	1000		VGC-13	08/12/10 19:18	MEF	
iso-Pentanoic Acid [503-74-2]	260	U	ug/L	1	260	500		VGC-13	08/12/10 19:18	MEF	
Lactic Acid [50-21-5]	440	U	ug/L	1	440	500	NE	VGC-13	08/12/10 19:18	MEF	
Pentanoic Acid [109-52-4]	270	U	ug/L	1	270	500		VGC-13	08/12/10 19:18	MEF	
Propionic Acid [79-09-4]	180	U	ug/L	1	180	500	NE	VGC-13	08/12/10 19:18	MEF	
Pyruvic Acid [127-17-3]	140	U	ug/L	1	140	500	NE	VGC-13	08/12/10 19:18	MEF	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Trimethylacetic acid	60000	1	50000	120 %	80-124	0H11010	VGC-13	08/12/10 19:18	MEF	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 0H05029 - EPA 5030B_MS

Blank (0H05029-BLK1)

Prepared: 08/05/2010 12:59 Analyzed: 08/06/2010 11:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.27	U	1.0	ug/L							
Benzene	0.20	U	1.0	ug/L							
Chloroethane	0.30	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.36	U	1.0	ug/L							
Ethylbenzene	0.20	U	1.0	ug/L							
m,p-Xylenes	0.48	U	2.0	ug/L							
o-Xylene	0.27	U	1.0	ug/L							
Toluene	0.27	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.34	U	1.0	ug/L							
Trichloroethene	0.38	U	1.0	ug/L							
Vinyl chloride	0.30	U	1.0	ug/L							
Xylenes (Total)	0.40	U	1.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	49			ug/L	50.0		98	57-131			
Surrogate: 4-Bromofluorobenzene	49			ug/L	50.0		98	51-122			
Surrogate: Dibromofluoromethane	47			ug/L	50.0		95	68-117			
Surrogate: Toluene-d8	46			ug/L	50.0		93	69-110			

LCS (0H05029-BS1)

Prepared: 08/05/2010 12:59 Analyzed: 08/06/2010 11:32

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0		94	75-133			
Benzene	18		1.0	ug/L	20.0		92	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		98	83-117			
Toluene	19		1.0	ug/L	20.0		97	71-118			
Trichloroethene	18		1.0	ug/L	20.0		92	75-115			

Matrix Spike (0H05029-MS1)

Prepared: 08/05/2010 12:59 Analyzed: 08/06/2010 12:01

Source: C009177-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.24 U	98	75-133			
Benzene	19		1.0	ug/L	20.0	0.20 U	94	81-134			
Chlorobenzene	19		1.0	ug/L	20.0	0.27 U	97	83-117			
Toluene	20		1.0	ug/L	20.0	0.27 U	100	71-118			
Trichloroethene	19		1.0	ug/L	20.0	0.38 U	96	75-115			

Matrix Spike Dup (0H05029-MSD1)

Prepared: 08/05/2010 12:59 Analyzed: 08/06/2010 12:30

Source: C009177-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.24 U	96	75-133	2	20	
Benzene	18		1.0	ug/L	20.0	0.20 U	90	81-134	4	17	
Chlorobenzene	19		1.0	ug/L	20.0	0.27 U	97	83-117	0.6	16	
Toluene	20		1.0	ug/L	20.0	0.27 U	98	71-118	2	17	
Trichloroethene	19		1.0	ug/L	20.0	0.38 U	93	75-115	3	18	

Batch 0H09012 - EPA 5030B_MS

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Blank (0H09012-BLK1)

Prepared: 08/09/2010 10:25 Analyzed: 08/09/2010 15:19

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Units	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.27	U	1.0	ug/L							
Benzene	0.20	U	1.0	ug/L							
Chloroethane	0.30	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.36	U	1.0	ug/L							
Ethylbenzene	0.20	U	1.0	ug/L							
m,p-Xylenes	0.48	U	2.0	ug/L							
o-Xylene	0.27	U	1.0	ug/L							
Toluene	0.27	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.34	U	1.0	ug/L							
Trichloroethene	0.38	U	1.0	ug/L							
Vinyl chloride	0.30	U	1.0	ug/L							
Xylenes (Total)	0.40	U	1.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	46			ug/L	50.0		92	57-131			
Surrogate: 4-Bromofluorobenzene	42			ug/L	50.0		84	51-122			
Surrogate: Dibromofluoromethane	46			ug/L	50.0		92	68-117			
Surrogate: Toluene-d8	43			ug/L	50.0		86	69-110			

LCS (0H09012-BS1)

Prepared: 08/09/2010 10:25 Analyzed: 08/09/2010 15:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Units	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0		109	75-133			
Benzene	21		1.0	ug/L	20.0		104	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		99	83-117			
Toluene	20		1.0	ug/L	20.0		98	71-118			
Trichloroethene	20		1.0	ug/L	20.0		98	75-115			

Matrix Spike (0H09012-MS1)

Prepared: 08/09/2010 10:25 Analyzed: 08/09/2010 16:19

Source: C009353-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Units	RPD	RPD Limit	Notes
1,1-Dichloroethene	21		1.0	ug/L	20.0	0.24 U	106	75-133			
Benzene	21		1.0	ug/L	20.0	0.20 U	103	81-134			
Chlorobenzene	20		1.0	ug/L	20.0	0.27 U	99	83-117			
Toluene	20		1.0	ug/L	20.0	0.27 U	101	71-118			
Trichloroethene	19		1.0	ug/L	20.0	0.38 U	96	75-115			

Matrix Spike Dup (0H09012-MSD1)

Prepared: 08/09/2010 10:25 Analyzed: 08/09/2010 16:50

Source: C009353-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Units	RPD	RPD Limit	Notes
1,1-Dichloroethene	21		1.0	ug/L	20.0	0.24 U	105	75-133	0.2	20	
Benzene	21		1.0	ug/L	20.0	0.20 U	103	81-134	0.5	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.27 U	100	83-117	1	16	
Toluene	20		1.0	ug/L	20.0	0.27 U	102	71-118	0.4	17	
Trichloroethene	19		1.0	ug/L	20.0	0.38 U	96	75-115	0.2	18	

Classical Chemistry Parameters - Quality Control

Batch 0H06006 - NO PREP

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Blank (0H06006-BLK1)

Prepared: 08/06/2010 07:21 Analyzed: 08/06/2010 08:21

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	8000	U	15000	ug/L							

LCS (0H06006-BS1)

Prepared: 08/06/2010 07:21 Analyzed: 08/06/2010 08:22

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	100		15	mg/L	100		100	80-120			

Matrix Spike (0H06006-MS1)

Prepared: 08/06/2010 07:21 Analyzed: 08/06/2010 08:23

Source: C008837-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	96		15	mg/L	40.0	49	117	80-120			

Matrix Spike Dup (0H06006-MSD1)

Prepared: 08/06/2010 07:21 Analyzed: 08/06/2010 08:24

Source: C008837-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity	94		15	mg/L	40.0	49	112	80-120	2	25	

Batch 0H06011 - NO PREP

Blank (0H06011-BLK1)

Prepared: 08/06/2010 11:41 Analyzed: 08/06/2010 11:51

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	31	U	100	ug/L							

LCS (0H06011-BS1)

Prepared: 08/06/2010 11:41 Analyzed: 08/06/2010 11:51

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.41		0.10	mg/L	0.401		101	80-120			

Matrix Spike (0H06011-MS1)

Prepared: 08/06/2010 11:41 Analyzed: 08/06/2010 11:51

Source: C009062-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	160		100	ug/L	401	31 U	41	80-120			QM-07

Matrix Spike Dup (0H06011-MSD1)

Prepared: 08/06/2010 11:41 Analyzed: 08/06/2010 11:51

Source: C009062-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	150		100	ug/L	401	31 U	38	80-120	8	25	QM-07

Batch 0H09017 - NO PREP

Blank (0H09017-BLK1)

Prepared: 08/09/2010 11:05 Analyzed: 08/09/2010 22:41

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0H09017 - NO PREP

Blank (0H09017-BLK1) Continued

Prepared: 08/09/2010 11:05 Analyzed: 08/09/2010 22:41

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	18	U	5000	ug/L							
Sulfate as SO ₄	120	U	5000	ug/L							

LCS (0H09017-BS1)

Prepared: 08/09/2010 11:05 Analyzed: 08/09/2010 23:00

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	49		5.0	mg/L	50.0		98	90-110			
Sulfate as SO ₄	47		5.0	mg/L	50.0		95	90-110			

Matrix Spike (0H09017-MS1)

Prepared: 08/09/2010 11:05 Analyzed: 08/09/2010 23:18

Source: C008837-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	93		5.0	mg/L	20.0	73	103	80-120			
Sulfate as SO ₄	51		5.0	mg/L	20.0	32	96	80-120			

Matrix Spike Dup (0H09017-MSD1)

Prepared: 08/09/2010 11:05 Analyzed: 08/09/2010 23:37

Source: C008837-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	93		5.0	mg/L	20.0	73	101	80-120	0.4	15	
Sulfate as SO ₄	51		5.0	mg/L	20.0	32	94	80-120	0.6	15	

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 0H11015 - NO PREP ANALYTIX

Blank (0H11015-BLK1)

Prepared: 08/11/2010 11:42 Analyzed: 08/11/2010 13:11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	780	U	2500	ug/L							
Ethane	0.450	U	2.00	ug/L							
Ethene	0.410	U	2.00	ug/L							
Methane	0.250	U	1.00	ug/L							

LCS (0H11015-BS1)

Prepared: 08/11/2010 11:42 Analyzed: 08/11/2010 13:15

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	29200		2500	ug/L	26300		111	71-119			
Ethane	180		2.00	ug/L	179		101	75-123			
Ethene	176		2.00	ug/L	167		105	72-131			
Methane	96.5		1.00	ug/L	95.8		101	74-116			

Matrix Spike (0H11015-MS1)

Prepared: 08/11/2010 11:42 Analyzed: 08/11/2010 13:30

Source: C009062-01

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 0H11015 - NO PREP ANALYTIX

Matrix Spike (0H11015-MS1) Continued

Prepared: 08/11/2010 11:42 Analyzed: 08/11/2010 13:30

Source: C009062-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	722000	E	2500	ug/L	26300	725000	NR	71-119			QM-02
Ethane	144		2.00	ug/L	179	0.450 U	81	75-123			
Ethene	136		2.00	ug/L	167	0.410 U	82	72-131			
Methane	282		1.00	ug/L	95.8	213	72	74-116			QM-02

Matrix Spike Dup (0H11015-MSD1)

Prepared: 08/11/2010 11:42 Analyzed: 08/11/2010 13:34

Source: C009062-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	727000	E	2500	ug/L	26300	725000	7	71-119	0.7	10	QM-02
Ethane	161		2.00	ug/L	179	0.450 U	90	75-123	11	14	
Ethene	153		2.00	ug/L	167	0.410 U	91	72-131	11	12	
Methane	292		1.00	ug/L	95.8	213	83	74-116	4	18	

Volatile Fatty Acids by HPLC - Quality Control

Batch 0H11010 - NO PREP ANALYTIX

Blank (0H11010-BLK1)

Prepared: 08/11/2010 10:43 Analyzed: 08/12/2010 08:52

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	83	U	500	ug/L							
Butyric Acid	160	U	500	ug/L							
Hexanoic Acid	230	U	1000	ug/L							
HTBA (2-Hydroxyisobutyric Acid)	160	U	500	ug/L							
iso-Hexanoic Acid	210	U	1000	ug/L							
iso-Pentanoic Acid	260	U	500	ug/L							
Lactic Acid	440	U	500	ug/L							
Pentanoic Acid	270	U	500	ug/L							
Propionic Acid	180	U	500	ug/L							
Pyruvic Acid	140	U	500	ug/L							
Surrogate: Trimethylacetic acid	59000			ug/L	50000		119	80-124			

LCS (0H11010-BS1)

Prepared: 08/11/2010 10:43 Analyzed: 08/12/2010 09:55

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	18000		500	ug/L	20000		89	73-125			
Butyric Acid	23000		500	ug/L	20000		116	80-120			
Hexanoic Acid	21000		1000	ug/L	20000		104	78-120			
HTBA (2-Hydroxyisobutyric Acid)	17000		500	ug/L	20000		87	80-120			
iso-Hexanoic Acid	22000		1000	ug/L	20000		111	80-120			
iso-Pentanoic Acid	23000		500	ug/L	20000		116	78-120			
Lactic Acid	17000		500	ug/L	20000		83	56-154			
Pentanoic Acid	22000		500	ug/L	20000		110	77-120			
Propionic Acid	18000		500	ug/L	20000		92	80-120			
Pyruvic Acid	15000		500	ug/L	20000		74	37-142			
Surrogate: Trimethylacetic acid	49000			ug/L	50000		99	80-124			

QUALITY CONTROL

Volatile Fatty Acids by HPLC - Quality Control

Batch 0H11010 - NO PREP ANALYTIX

Matrix Spike (0H11010-MS1)

Prepared: 08/11/2010 10:43 Analyzed: 08/12/2010 10:57

Source: C009062-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	16000		500	ug/L	20000	83 U	79	73-125			
Butyric Acid	21000		500	ug/L	20000	160 U	105	80-120			
Hexanoic Acid	19000		1000	ug/L	20000	230 U	95	78-120			
HiBA (2-Hydroxyisobutyric Acid)	17000		500	ug/L	20000	160 U	84	80-120			
iso-Hexanoic Acid	21000		1000	ug/L	20000	2600	90	80-120			
iso-Pentanoic Acid	24000		500	ug/L	20000	260 U	120	78-120			
Lactic Acid	18000		500	ug/L	20000	440 U	90	56-154			
Pentanoic Acid	16000		500	ug/L	20000	270 U	78	77-120			
Propionic Acid	22000		500	ug/L	20000	180 U	108	80-120			
Pyruvic Acid	16000		500	ug/L	20000	140 U	78	37-142			
Surrogate: Trimethylacetic acid	58000			ug/L	50000		115	80-124			

Matrix Spike Dup (0H11010-MSD1)

Prepared: 08/11/2010 10:43 Analyzed: 08/12/2010 12:00

Source: C009062-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	15000		500	ug/L	20000	83 U	77	73-125	3	10	
Butyric Acid	20000		500	ug/L	20000	160 U	101	80-120	4	10	
Hexanoic Acid	22000		1000	ug/L	20000	230 U	109	78-120	14	34	
HiBA (2-Hydroxyisobutyric Acid)	16000		500	ug/L	20000	160 U	82	80-120	2	15	
iso-Hexanoic Acid	19000		1000	ug/L	20000	2600	85	80-120	5	15	
iso-Pentanoic Acid	23000		500	ug/L	20000	260 U	114	78-120	5	15	
Lactic Acid	20000		500	ug/L	20000	440 U	101	56-154	11	19	
Pentanoic Acid	17000		500	ug/L	20000	270 U	83	77-120	6	10	
Propionic Acid	22000		500	ug/L	20000	180 U	109	80-120	1	10	
Pyruvic Acid	16000		500	ug/L	20000	140 U	81	37-142	4	10	
Surrogate: Trimethylacetic acid	55000			ug/L	50000		109	80-124			

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0H09013 - NO PREP

Blank (0H09013-BLK1)

Prepared: 08/09/2010 12:16 Analyzed: 08/09/2010 13:47

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	320	U	1000	ug/L							

LCS (0H09013-BS1)

Prepared: 08/09/2010 12:16 Analyzed: 08/09/2010 13:47

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	44000		1000	ug/L	41600		106	85-115			

Matrix Spike (0H09013-MS1)

Prepared: 08/09/2010 12:16 Analyzed: 08/09/2010 13:47

Source: A004252-01

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0H09013 - NO PREP

Matrix Spike (0H09013-MS1) Continued

Prepared: 08/09/2010 12:16 Analyzed: 08/09/2010 13:47

Source: A004252-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	49000		1000	ug/L	40000	7200	106	85-115			

Matrix Spike Dup (0H09013-MSD1)

Prepared: 08/09/2010 12:16 Analyzed: 08/09/2010 13:47

Source: A004252-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	49000		1000	ug/L	40000	7200	106	85-115	0.05	21	

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
QM-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

102-A Woodbine Industrial Dr.
Cary, NC 27511
(919) 467-3296 Fax (919) 467-3473

15375 Central Exp. Dr.
Charlotte, NC 28205
(704) 296-3207 Fax (704) 296-4210

Page of

Client Name S&ME, Inc. (SIV0004)	Project Number [none]
Address 3718 Old Battleground Rd. Greensboro, NC 27410	Project Name/Zone White Street Landfill MNA
City/State/Zip Greensboro, NC 27410	PG or Drawing Info PG 000000
Tel (336) 288-7180	Reporting Contact Connel Ware
Fax (336) 288-8580	Billing Contact Accounts Payable
Sample Name, Allusion, Point GAR SIMON / SIME	
Sample ID & initials [Signature]	Site Location / Time Zone

Requested Turnaround Times None. Requests subject to acceptance by the facility
Standard
Expedited
Duc
Lab Workorder C009062

Item #	Sample ID (Field Identifier)	Collection Date	Container Type	Matrix (see notes)	Total # of Containers	Preservation (See Chain of Custody and Inventory)	Requested Analysis	Requested Turnaround Times	Sample Comments
4103-MW14	8/2/10	1515	G	GW	13	X	8260B Appendix 1 Fatty Acids Nitrate Calc 353.2 NOX 353.2 RSK 175 + CO2 Sulfate 300 Sulfide SM4500-S D TOC SM5310B		
4103-I1	8/3/10	1010	G	GW	13	X			
4103-I2	8/3/10	0830	G	GW	13	X			
4103-I7	8/3/10	1510	G	GW	13	X			
4103-I7B	8/3/10	1330	G	GW	13	X			
4103-I9	8/3/10	1145	G	GW	13	X			
4103-TripBlank				WA	2	X			

Sample Kit Prepared By [Signature]	Relinquished By [Signature]	Date Time 8/4/10 0700	Received By [Signature]	Date Time 8-4-10 930
Our work complies with all Reporting Requirements	Relinquish Authority [Signature]	Date Time 8-4-10 11:15	Accepted By [Signature]	Date Time 8-4-10 11:15
Container & Sample Information C-774 13C DW 21C		Condition upon Receipt X Acceptable		

Matrix: GW-Groundwater, SO-Sewer, DW-Drinking Water, SW-Surface Water, WW-Wastewater, A-Air, O-Other (please specify in comments)
 Note: All sampling, storage, and analysis by ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless there are written agreements to the contrary.





2775 Central Express Dr.

2017-2018

5155-055 (20) AK-1 4107 g/ta (20)

Page of


Client Name		Project Name		Project Number		Requested Turnaround Times	
S&ME, Inc. (SM004)		[none]		[none]		Standard	
Address		Project Name Desc		Project Number		Expedited	
3718 Old Battleground Rd.		White Street Landfill MNA		PO # Billing Info		Due	
Greensboro, NC 27410		PO # Billing Info		PO # Billing Info		Due	
Fax		Report to Contact		Report to Contact		Lab Workorder	
(336) 288-7780		Corinist Ware		Corinist Ware		C009062	
Sampling Name		Sampling Name		Sampling Name		Sampling Name	
GUY SIMON		GUY SIMON		GUY SIMON		GUY SIMON	
Sampling Signature		Sampling Signature		Sampling Signature		Sampling Signature	
Sampling Signature		Sampling Signature		Sampling Signature		Sampling Signature	
Sample ID Field Identification	Collection Date	Collection Time	Completion Date	Lab Project Contact	Total # of Containers	Preservation (See Codes) (Comments if necessary)	Sample Comments
4103-MW14	8/4/10	0900	G	GW	13		
4103-H1				GW	13		
4103-H2				GW	13		
4103-H2B				GW	13		
4103-H7				GW	13		
4103-H7B				GW	13		
4103-H9				GW	13		
4103-Trip Blank				WA	2		
Total # of Containers						Requested Analyses	
8260B Appendix 1						Fatty Acids	
8260B Appendix 1						Nitrate Calc 353.2	
8260B Appendix 1						NOX 353.2	
8260B Appendix 1						RSK 175 + CO2	
8260B Appendix 1						Sulfate 300	
8260B Appendix 1						Sulfide SM4500-S D	
8260B Appendix 1						TOC SM5310B	
8260B Appendix 1						Due	
8260B Appendix 1						Lab Workorder	
8260B Appendix 1						C009062	

Client Name: S&ME, Inc. (SM004)

Address: 3718 Old Battleground Rd. Greensboro, NC 27410

Fax: (336) 288-7780

Sampling Name: GUY SIMON


Sampling Signature: 

Project Name: [none]

Project Number: [none]

Report to Contact: Corinist Ware

Sampling Name: GUY SIMON

Sampling Signature: 

Requested Turnaround Times: Standard

Due: / /

Lab Workorder: C009062


Sample ID Field Identification	Collection Date	Collection Time	Completion Date	Lab Project Contact	Total # of Containers	Preservation (See Codes) (Comments if necessary)	Sample Comments
4103-MW14	8/4/10	0900	G	GW	13		
4103-H1				GW	13		
4103-H2				GW	13		
4103-H2B				GW	13		
4103-H7				GW	13		
4103-H7B				GW	13		
4103-H9				GW	13		
4103-Trip Blank				WA	2		
Total # of Containers						Requested Analyses	
8260B Appendix 1						Fatty Acids	
8260B Appendix 1						Nitrate Calc 353.2	
8260B Appendix 1						NOX 353.2	
8260B Appendix 1						RSK 175 + CO2	
8260B Appendix 1						Sulfate 300	
8260B Appendix 1						Sulfide SM4500-S D	
8260B Appendix 1						TOC SM5310B	
8260B Appendix 1						Due	
8260B Appendix 1						Lab Workorder	
8260B Appendix 1						C009062	

Client Name: S&ME, Inc. (SM004)

Address: 3718 Old Battleground Rd. Greensboro, NC 27410

Fax: (336) 288-7780

Sampling Name: GUY SIMON


Sampling Signature: 

Project Name: [none]

Project Number: [none]

Report to Contact: Corinist Ware

Sampling Name: GUY SIMON

Sampling Signature: 

Requested Turnaround Times: Standard

Due: / /

Lab Workorder: C009062

Sample ID Field Identification

Collection Date

Collection Time

Completion Date

Lab Project Contact

Total # of Containers

Requested Analyses

Fatty Acids

Nitrate Calc 353.2

NOX 353.2

RSK 175 + CO2

Sulfate 300

Sulfide SM4500-S D

TOC SM5310B

Due

Lab Workorder

C009062

Sample ID Field Identification

Collection Date

Collection Time

Completion Date

Lab Project Contact

Total # of Containers

Requested Analyses

Fatty Acids

Nitrate Calc 353.2

NOX 353.2

RSK 175 + CO2

Sulfate 300

Sulfide SM4500-S D

TOC SM5310B

Due

Lab Workorder

C009062





Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 1 of 8
Lab Proj #: P1008093
Report Date: 08/13/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

Laboratory Results

Total pages in data package: 9

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1008093-01	MW-14
P1008093-02	II-1
P1008093-03	II-2
P1008093-04	II-2B
P1008093-05	II-7
P1008093-06	II-7B
P1008093-07	II-9

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo **Date:** 8-16-10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 2 of 8
Lab Proj #: P1008093
Report Date: 08/13/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-14	Vapor	P1008093-01	04 Aug. 10 9:40	09 Aug. 10 10:56		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	0.820	0.600	nM	AM20GAX	8/12/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 3 of 8
Lab Proj #: P1008093
Report Date: 08/13/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-1	Vapor	P1008093-02	02 Aug. 10 15:45	09 Aug. 10 10:56		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	4.800	0.600	nM	AM20GAX	8/11/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 4 of 8
Lab Proj #: P1008093
Report Date: 08/13/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-2	Vapor	P1008093-03	03 Aug. 10 10:45	09 Aug. 10 10:56		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	0.910	0.600	nM	AM20GAX	8/12/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 5 of 8
Lab Proj #: P1008093
Report Date: 08/13/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-2B	Vapor	P1008093-04	03 Aug. 10 8:55	09 Aug. 10 10:56		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	6.000	0.600	nM	AM20GAX	8/12/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 6 of 8
Lab Proj #: P1008093
Report Date: 08/13/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-7	Vapor	P1008093-05	03 Aug. 10 15:50	09 Aug. 10 10:56		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Hydrogen	1.500	0.600	nM	AM20GAX	8/12/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 7 of 8
Lab Proj #: P1008093
Report Date: 08/13/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-7B	Vapor	P1008093-06	03 Aug. 10 14:10	09 Aug. 10 10:56		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	1.100	0.600	nM	AM20GAX	8/12/10	sl



Client Name: S & ME
Contact: Connel Ware
Address: 3718 Old Battleground Road
Greensboro, NC 27410

Page: Page 8 of 8
Lab Proj #: P1008093
Report Date: 08/13/10
Client Proj Name: White Street LF
Client Proj #: 1584-98-081

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
II-9	Vapor	P1008093-07	03 Aug. 10 12:30	09 Aug. 10 10:56		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Hydrogen	0.890	0.600	nM	AM20GAX	8/12/10	sl



Proo 8093

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-5245

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238

Fax No. : (412) 826-3433

Company :

SENE Inc.

Co. Address :

3715. Old Battle ground Road, Greensboro,
NC 27410

Phone # :

(336) 288-7180

Fax #: (336) 288-5950 NC 274

Proj. Manager :

Cornel Ware



Proj. Name/Number: White Street Landfill - 1584-98-081 (MUN)

Sampler's signature :

representing
Gary Sincore

Cooler Temp.

[illegible]

Relinquished by : 	Company : S&ME Inc	Date : 8/16/10	Time : 1600	Received by : 	Company : M	Date : 8/9	Time : 1600
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Assessor's Office

WHITE COPY : Accompany Samples

YELLOW COPY : Laboratory File

PINK COPY : Submitter